# 04 - STRUCTURES INDEX OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE
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S-4	BRIDGE NO. 01687 JOINT DETAILS 1
S-5	BRIDGE NO. 01687 JOINT SEAL DETAILS 2
S-6	ASPHALTIC PLUG EXPANSION JOINT SYSTEM DETAILS 1
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S-13	CRACK SEAL AND PARAPET JOINT SEAL DETAILS
S-14	BRIDGE NO. 05882 PARAPET JOINT SEAL DETAILS

THE DESIGN APPEARS TO CONFORM TO APPLICABLE CRITERIA. APPROVAL IS NOT TO BE CONSTRUED TO MEAN THAT ALL ASPECTS OF THE DESIGN HAVE BEEN PERSONALLY CHECKED BY THE UNDERSIGNED.

TRANSPORTATION PRINCIPAL ENGINEER

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				THE INFORMATION, INCLUDING ESTIMATED	
				QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED	СН
				INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE	
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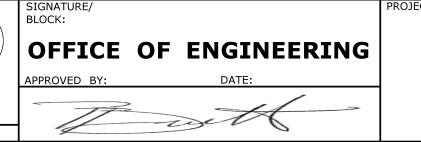
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RPL

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

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PAVEMENT PRESERVATION
MILLING AND RESURFACING
OF INTERSTATE 91

CITY OF HARTFORD TOWN OF WINDSOR

STRUCTURES
INDEX OF DRAWINGS

63-702

DRAWING NO.

S-1

#### **GENERAL NOTES**

- SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 816 (2004), AND SUPPLEMENTAL SPECIFICATIONS DATED JULY 2014 AND SPECIAL PROVISIONS.
- DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, 2014, U. S. CUSTOMARY UNITS AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003).
- REINFORCING BARS: REINFORCING BARS IN ALL CONCRETE RECONSTRUCTIONS SHALL CONFORM TO ASTM A615, GRADE 60, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A767, CLASS 1. CONCRETE COVER TO BE 2 INCHES.

### ASPHALTIC PLUG EXPANSION JOINT SYSTEM NOTES

- 1. A BRIDGING PLATE SHALL BE USED TO SPAN THE GAP BETWEEN TWO DECK ENDS OR THE JOINT BETWEEN A DECK END AND A CONCRETE APPROACH SLAB
- 2. DISCONTINUE THE INSTALLATION OF THE BACKER ROD, BRIDGING PLATE AND LOCATING PIN WHERE THE APPROACH SLAB IS DISCONTINUED (TYPICALLY IN THE ROADWAY SHOULDERS). SEE ASPHALTIC PLUG EXPANSION JOINT SYSTEM SPECIAL PROVISION.
- 3. NEW STEEL BRIDGING PLATES SHALL HAVE A MINIMUM THICKNESS OF  $\frac{1}{4}$ ". FOR JOINT OPENINGS THAT EXCEED 3" A  $\frac{3}{8}$ " THICK BY 12" WIDE PLATE WILL BE REQUIRED.
- NO BRIDGING PLATE SHALL BE USED AT THE FOLLOWING LOCATIONS: A. JOINT BETWEEN A DECK END AND A
  - CONCRETE APPROACH PAVEMENT
  - B. WHERE A BRIDGE DECK END MEETS A BITUMINOUS APPROACH PAVEMENT
- 5. SAW-CUTS MADE 3 FT. EACH SIDE OF CENTERLINE OF JOINT WILL BE PAID AS "CUT BITUMINOUS CONCRETE PAVEMENT".
- 6. THE REMOVAL OF ALL EXISTING JOINT SYSTEMS AND BITUMINOUS CONCRETE WITHIN THE LIMITS SHOWN TO BE INCLUDED FOR PAYMENT UNDER THE ITEM "REMOVAL OF HMA WEARING SURFACE".
- INSTALLATION OF MEMBRANE WITHIN THE LIMITS SHOWN TO BE PAID FOR UNDER THE ITEM, "MEMBRANE WATERPROOFING (GLASS WOVEN FABRIC)"
- CRACK SEALANT PLACED ALONG VERTICAL FACES OF THE SAW-CUT PAVEMENT TO BE PAID FOR UNDER THE ITEM, "JOINT AND CRACK SEALING OF BITUMINOUS CONCRETE PAVEMENT".
- 9. THE FURNISHING AND PLACING OF HMA S0.375 TO BE INCLUDED FOR PAYMENT UNDER ITEM THE ITEM "HMA S0.375".
- 10. SAW-CUTTING AND REMOVAL OF PAVEMENT FOR JOINT INSTALLATION TO BE INCLUDED FOR PAYMENT UNDER THE ITEM, "ASPHALTIC PLUG EXPANSION JOINT SYSTEM".
- 11. CLOSED CELL BACKER ROD DIAMETER SHALL BE DETERMINED AFTER MEASURING THE JOINT OPENING. THE ROD SHALL BE 25% LARGER THAN THE JOINT OPENING.
- ASPHALTIC PLUG EXPANSION JOINT SYSTEMS MAY BE INSTALLED ONLY WITHIN THE TEMPERA-TURE RANGE SPECIFIED IN THE SPECIAL PROVISION "ASPHALTIC PLUG EXPANSION JOINT SY-STEM". REFERENCE THE RANGE OF THERMAL MOVEMENT FOR THE SELECTED JOINT PRODUCT IN THE TABLE FOR "ALLOWABLE BRIDGE SUPERSTRUCTURE SURFACE TEMPERATURE RANGE" IN THE SPECIAL PROVISION.

### REPLACE JOINT SEAL NOTES

- 1. PRIOR TO INSTALLING THE SILICONE SEALANT, CLEAN JOINT SIDES BY SANDBLASTING, DUST SHALL BE REMOVED BY THE METHOD APPROVED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR UNDER THE ITEM "REPLACE JOINT SEAL".
- BRIDGE NO. 05882: USE THE PREFORMED JOINT SEAL BY SILICOFLEX BY R. J. WATSON, INC. OR V-SEAL BY D. S. BROWN, COMPANY.

SHEET NO. Plotted Date: 12/12/2014

3. BRIDGE NO. 01687: USE PREFORMED JOINT SEAL BY EMSEAL JOINT SYSTEM, LTD.

### NOTICE TO CONTRACTOR APJ BITUMINOUS CONCRETE PLACEMENT REQUIREMENTS

- 1. ALL THE REQUIREMENTS OF SPECIAL PROVISION SECTION 4.06 IN THE CONTRACT SHALL BE MET EXCEPT AS DESCRIBED BELOW.
- 2. THE BITUMINOUS CONCRETE MATERIAL SHALL BE PLACED AT A COMPACTED THICKNESS OF NO LESS THAN 1 ¼ INCHES TO A MAXIMUM OF 2 ½ INCHES. IF LIFTS OF VARYING THICKNESS ARE REQUIRED, THEY SHALL BE CONTAINED IN THE INTERMEDIATE LIFTS. THE FINAL LIFT SHALL BE OF UNIFORM THICKNESS. IN LIEU OF DENSITY TESTING, THE METHODS DESCRIBED BELOW SHALL BE FOLLOWED TO ASSURE PROPER COMPACTION.
- 3. BITUMINOUS CONCRETE MATERIAL SHALL BE PLACED AND SPREAD IN THE PREPARED AREA WITH COMPACTION COMMENCING PRIOR TO THE MATERIAL COOLING TO A TEMPERATURE OF 260°F. WHEN ANY BITUMINOUS CONCRETE MATERIAL IS NOT ABLE TO BE PLACED BEFORE REACHING THE MINIMUM DELIVERY TEMPERATURE OF 265°F IT SHALL BE PROPERLY DISCARDED BY THE CONTRACTOR AT NO COST TO THE STATE.
- 4. THE BITUMINOUS CONCRETE MATERIAL SHALL BE COMPACTED BY ALL AREAS RECEIVING THE MINIMUM NUMBER OF PASSES REQUIRED IN TABLE A BEFORE IT COOLS TO A TEMPERATURE OF 180°F. ALL COMPACTION (COMPLETING THE MINIMUM NUMBER OF SPECIFIED PASSES) SHALL BE COMPLETED BEFORE THE BITUMINOUS CONCRETE COOLS TO A TEMPERATURE OF 180°F. THE CONTRACTOR SHALL USE THE NUMBER OF COMPACTING EQUIPMENT NECESSARY TO COMPLETE THE PROCEDURE AS REQUIRED.
- 5. ALL INTERMEDIATE (NON-SURFACE) LIFTS SHALL BE COMPACTED WITH AN ASPHALT VIBRATORY PLATE COMPACTOR.
  - a. THE VIBRATORY PLATE COMPACTOR SHALL MEET THE FOLLOWING REQUIREMENTS:
    - IT SHALL BE DESIGNED TO COMPACT BITUMINOUS CONCRETE.
    - IT SHALL BE EQUIPPED WITH A WATER TANK.
    - iii. IT SHALL GENERATE A CENTRIFUGAL FORCE OF AT LEAST 3200
    - POUNDS BUT NO GREATER THAN 6000 POUNDS. iv. IT SHALL HAVE AN OPERATING WEIGHT (WITHOUT WATER) OF AT LEAST 160 POUNDS.
    - v. IT SHALL GENERATE A MINIMUM OF 4400 VIBRATIONS PER
    - vi. ANY CORNERS OR OTHER AREAS THAT CANNOT BE REACHED BY THE VIBRATORY PLATE COMPACTOR SHALL BE COMPACTED WITH A HAND TAMPER (APPROVED FOR USE BY THE ENGINEER) A MINIMUM OF 20 TIMES (FOR ANY GIVEN AREA) BEFORE THE MATERIAL TEMPERATURE DROPS TO 180°F.
- THE FINAL (SURFACE) LIFT SHALL BE COMPACTED WITH A DOUBLE DRUM ROLLER.
  - a. THE DOUBLE DRUM ROLLER SHALL MEET THE FOLLOWING REQUIREMENTS:
    - i. IT SHALL BE DESIGNED TO COMPACT BITUMINOUS CONCRETE.
    - ii. IT SHALL WEIGH 3 ½ TO 4 ½ TONS
- 7. THE CONTRACTOR MAY REQUEST TO USE ALTERNATE EQUIPMENT BY SUBMITTING A SUPPLEMENT TO THEIR QC PLAN DESCRIBING THE EQUIPMENT'S SPECIFICATIONS AND PLACEMENT PROCEDURES. THE EQUIPMENT AND PROCEDURES MUST BE APPROVED BY THE ENGINEER PRIOR TO THEIR USE.
- 8. IF THE ABOVE METHODS ARE NOT COMPLETED TO THE SATISFACTION OF THE ENGINEER, HE MAY REQUIRE THE DENSITY ANY LIFT OF 1 ½ INCHES OR GREATER BE VERIFIED BY USE OF A QUALITY CONTROL NUCLEAR DENSITY GAUGE SUPPLIED BY THE CONTRACTOR. IF DENSITY VERIFICATION IS REQUIRED BY THE ENGINEER THE VALUES MUST CONFORM TO THE REQUIREMENTS OF SPECIAL PROVISION SECTION 4.06 IN THE CONTRACT.

TABLE A

LIFT THICKNESS (IN.)	NUMBER OF PASSES							
1 ¼ to 1 ½	8							
GREATER THAN 1 ½ TO 2	10							
GREATER THAN 2 TO 2 ½	12							

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

REVISION DESCRIPTION

REV. DATE

**MJPL RPL** 

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

Filename: ...\S-2\_sb\_00630702\_General\_Notes.dgn

OFFICE OF ENGINEERING

**PAVEMENT PRESERVATION** MILLING AND RESURFACING OF INTERSTATE 91

CITY OF HARTFORD TOWN OF WINDSOR

63-702 **S-2** 

SHEET NO.

**GENERAL NOTES** 

	BRIDGE INFORMATION FOR THE INSTALLATION OF DECK EXPANSION JOINTS (HARTFORD AND WINDSOR)												
	BRIDGE DATA							ABUTMENT 1*				ENT 2**	
BRIDGE NO.	MILE POINT	LOCATION	NO. OF TRAVEL LANES	SIDE WALKS	CURB- CURB WIDTH (FT.)	MAX. THERMAL EXAPANSION (IN.)	SKEW (DEGREES)	DECK JOINT DETAIL	PARAPET JOINT DETAIL	MAX. THERMAL EXAPANSION (IN.)	SKEW (DEGREES)	DECK JOINT DETAIL	PARAPET JOINT DETAIL
01687	38.59	I-91 & TR 841 OVER CT SOUTHERN RAILROAD, HARTFORD	7	NO	103.00	0.62	N/A	A/S-4	L/S-13	0.63	N/A	B/S-5	L/S-13
05862	39.21	I-91 SB OVER CT SOUTHERN RAILROAD, HARTFORD	4	NO	68.00	1.24	48.00	D/S-7	L/S-13	0.58	48.00	D/S-7	L/S-13
05863	39.21	I-91 NB OVER CT SOUTHERN RAILROAD, HARTFORD	4	NO	68.00	1.24	44.00	D/S-7	L/S-13	0.58	44.00	D/S-7	L/S-13
05864	39.48	I-91 NB OVER LIEBERT ROAD, HARTFORD	5	NO	80.00	0.62	12.00	D/S-7	L/S-13	0.62	12.00	D/S-7	L/S-13
05866	40.80	I-91 NB OVER WESTON STREET, HARTFORD	4	NO	84.00	0.00	3.00	D/S-7	L/S-13	0.77	3.00	D/S-7	L/S-13
05881A	41.13	I-91 NB OVER ROUTE 159, WINDSOR	4	NO	75.00	1.47	31.00	D/S-7	L/S-13	1.47	33.00	D/S-7	L/S-13
05881B	41.13	I-91 SB OVER ROUTE 159, WINDSOR	4	NO	75.00	1.47	31.00	D/S-7	L/S-13	1.47	32.00	D/S-7	L/S-13
05882	0.04	I-91 NB ON RAMP OVER ROUTE 159, WINDSOR	1	NO	26.00	0.00	4.00	C/S-6	L/S-13	1.30	29.00	G/S-10	N/S-14
05924	40.97	I-91 NB ON RAMP OVER AMTRAK RAILROAD, HARTFORD	5	NO	84.10	0.47	28.00	D/S-7	L/S-13	0.95	28.00	D/S-7	L/S-13
05976A	43.51	I-91 SB OVER ROUTE 178 (PARK AVENUE), WINDSOR	4	NO	75.00	0.00	10.00	C/S-6	L/S-13	1.12	10.00	C/S-6	L/S-13
05976B	43.51	I-91 NB OVER ROUTE 178 (PARK AVENUE), WINDSOR	4	NO	75.00	0.00	11.00	C/S-6	L/S-13	1.12	11.00	C/S-6	L/S-13
05977A	42.82	I-91 SB OVER ROOD AVENUE, WINDSOR	4	NO	75.00	0.95	26.00	D/S-7	L/S-13	0.00	26.00	C/S-6	L/S-13
05977B	42.82	I-91 NB OVER ROOD AVENUE, WINDSOR	5	NO	87.00	0.95	26.00	D/S-7	L/S-13	0.00	26.00	C/S-6	L/S-13
05979A	44.10	I-91 NB OVER CAPEN STREET, WINDSOR	4	NO	75.00	0.88	3.00	C/S-6	L/S-13	0.00	3.00	C/S-6	L/S-13
05979B	44.10	I-91 SB OVER CAPEN STREET, WINDSOR	4	NO	86.40	0.87	6.00	C/S-6	L/S-13	0.00	6.00	C/S-6	L/S-13
05994	39.48	I-91 SB OVER LIEBERT ROAD, HARTFORD	4	NO	68.00	0.62	12.00	D/S-7	L/S-13	0.62	12.00	D/S-7	L/S-13
05995	40.80	I-91 SB OVER WESTON STREET, HARTFORD	4	NO	97.00	0.00	3.00	D/S-7	L/S-13	0.77	3.00	D/S-7	L/S-13
06008	40.96	I-91 NB ON RAMP OVER AMTRAK RAILROAD, HARTFORD	4	NO	75.30	0.47	28.00	D/S-7	L/S-13	0.95	28.00	D/S-7	L/S-13
06040A	41.26	I-91 SB OVER KENEY PARK ROAD & MEADOW BROOK, HARTFORD	4	NO	75.00	1.04	36.00	D/S-7	L/S-13	1.04	36.00	D/S-7	L/S-13
06040B	41.26	I-91 NB OVER KENEY PARK ROAD & MEADOW BROOK, HARTFORD	5	NO	87.00	1.04	36.00	D/S-7	L/S-13	1.04	36.00	D/S-7	L/S-13
06151	0.71	I-91 SB ON RAMP OVER AMTRAK RAILROAD, HARTFORD	1	NO	24.00	0.46	23.00	D/S-7	L/S-13	0.95	23.00	D/S-7	L/S-13
06218	0.32	I-91 RAMP 204 OVER I-91 TR855, HARTFORD	1	NO	24.00	0.00	45.00	D/S-7	L/S-13	1.50	46.00	D/S-7	L/S-13
06219	0.61	I-91 TR 854 & 855 OVER I-291 RAMP 001, HARTFORD	2	NO	77.00	0.00	30.00	D/S-7	L/S-13	1.13	46.00	D/S-7	L/S-13

## **ABUTMENT 1 REFERS TO THE SOUTH ABUTMENT**

## **ABUTMENT 2 REFERS TO THE NORTH ABUTMENT**

\* JOINT 1 ON SHEET NO. HWY-04

\*\* JOINTS 2 AND 3 ON SHEET NO. HWY-04

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 12/12/2014

DESIGNER/DRAFTER:
MJPL
CHECKED BY:
RPL

NOT TO SCALE





PAVEMENT PRESERVATION MILLING AND RESURFACING OF INTERSTATE 91 CITY OF HARTFORD TOWN OF WINDSOR

TOWN OF WINDSOR

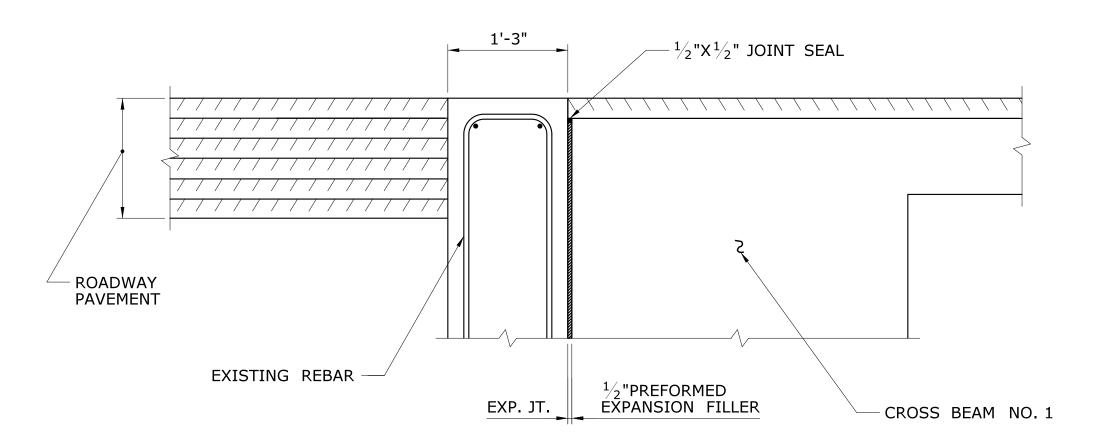
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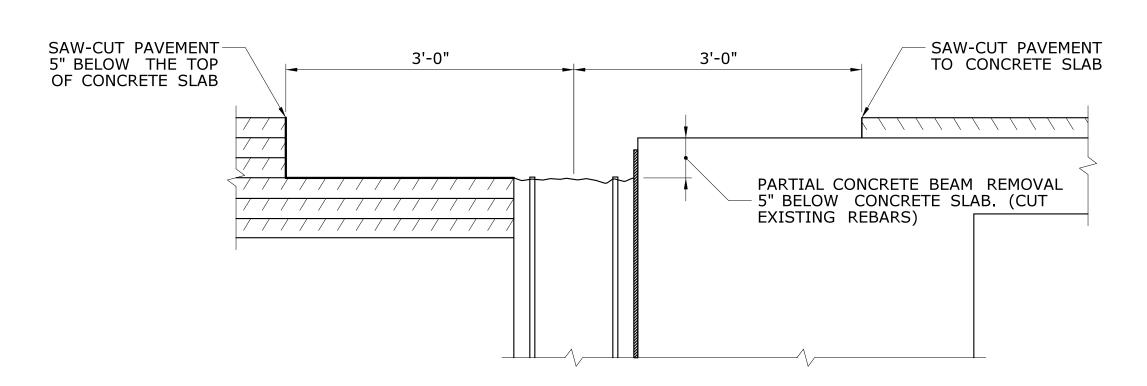
EXPANSION DECK JOINT INSTALLATION TABLE

DRAWING NO. S-3

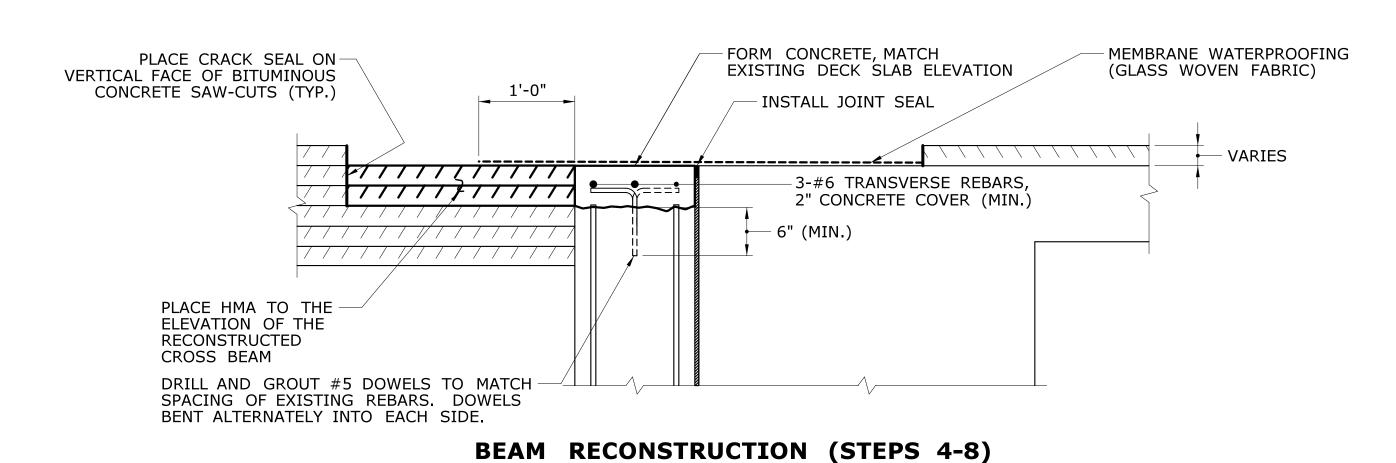
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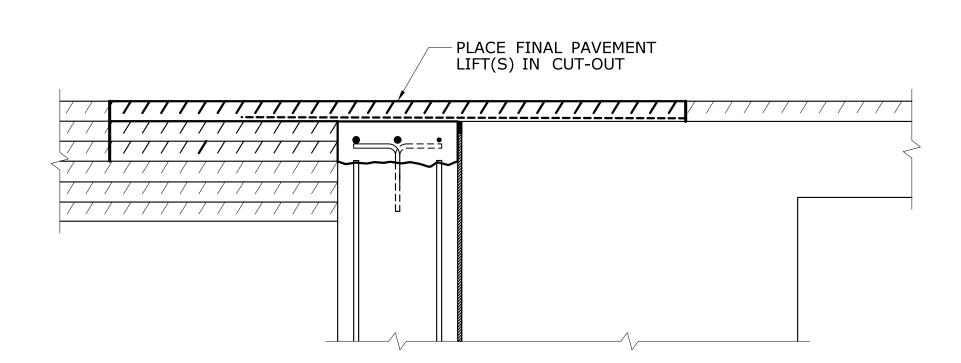
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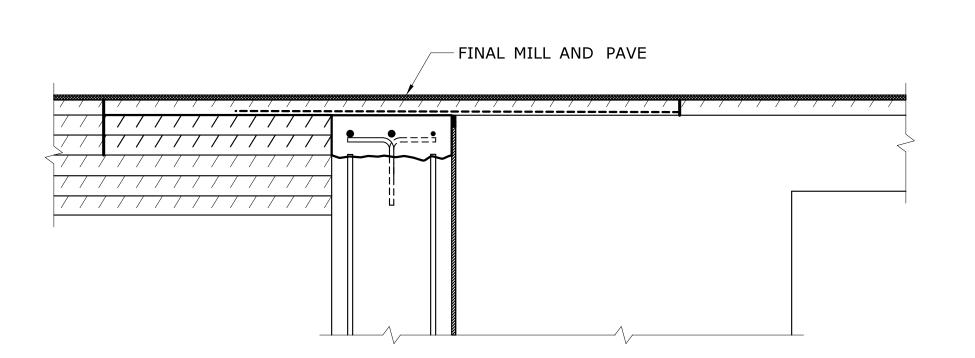


## PAVEMENT AND PARTIAL BEAM REMOVAL (STEPS 1-3)





## PLACE PAVEMENT IN CUT-OFF (STEP 9)



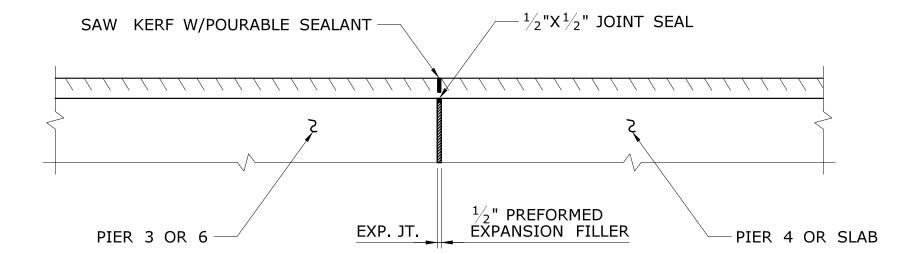
## FINAL MILL AND PAVE (STEPS 10 AND 11)

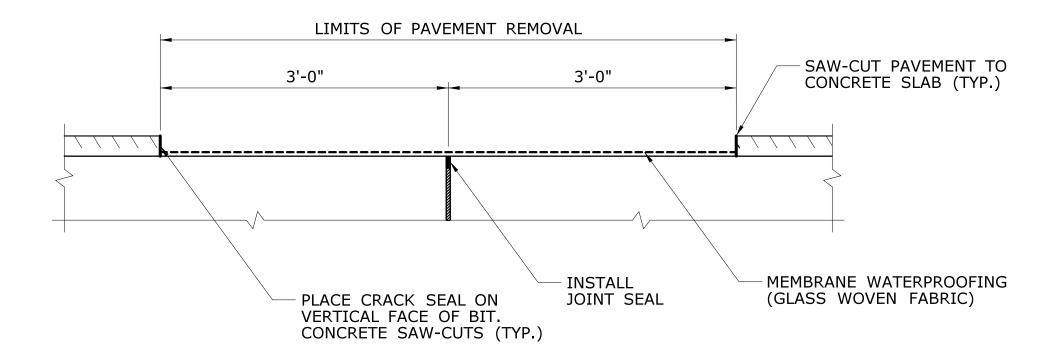
## SUGGESTED SEQUENCE OF WORK

- STEP 1: CONTRACTOR SHALL PERFORM AN EXPLORATION TO DETERMINE THE CENTER OF THE BEAM AT BOTH ENDS BEFORE PROCEEDING TO STEP 2.
- STEP 2: SAW-CUT BITUMINOUS PAVEMENT TO THE DEPTHS SHOWN ON THE DETAILS. EACH SAW-CUT LINE SHALL BE 3' FROM THE CENTERLINE OF THE EXISTING JOINT. SAW-CUT SHALL NOT DAMAGE THE EXISTING DECK SLAB.
- STEP 3: REMOVE EXISTING PAVEMENT MATERIAL AND PARTIAL CONCRETE BEAM REMOVAL WITHIN THE LIMITS SHOWN ON THE DETAILS. REMOVAL OF PAVEMENT TO BE PAID FOR UNDER ITEM "REMOVAL OF HMA WEARING SURFACE". CONCRETE REMOVAL, DRILLING AND GROUTING OF DOWELS AND STEEL REINFORCEMNT TO BE FOR UNDER ITEM "RECONSTRUCT CONCRETE DECK ENDS"
- STEP 4: RECONSTRUCT CONCRETE BEAM TO MATCH THE ELEVATION OF THE ADJACENT SLAB AS SHOWN ON THE PLANS. CONCRETE REMOVAL, DRILLING AND GROUTING OF DOWELS, AND STEEL REINFORCEMENT TO BE PAID FOR UNDER ITEM "RECONSTRUCT CONCRETE DECK ENDS".
- STEP 5: INSTALL EMSEAL JOINT SEAL ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND REQUIREMENTS. TO BE PAID FOR UNDER ITEM "REPLACE JOINT SEAL".
- STEP 6: PLACE CRACK SEALANT ON VERTICAL EDGE OF PAVEMENT ALONG SAW-CUT LINES. FOR STAGED CONSTRUCTION, SEE DETAIL 'K' ON SHEET S-13.
- STEP 7: PLACE HMA S0.375 TO THE ELEVATION OF THE RECONSTRUCTED BEAM. EACH LIFT TO BE  $1\frac{1}{4}$ " TO  $2\frac{1}{2}$ " THICK. MATCH THE ELEVATION OF THE EXISITNG PAVEMENT. REFER TO GENERAL NOTES APJ BITUMINIOUS CONCRETE PLACEMENT REQUIREMENTS.
- STEP 8: INSTALL WATERPROOFING MEMBRANE (WOVEN GLASS FABRIC) WITHIN THE LIMITS SHOWN. SEE DETAIL 'J' ON SHEET S-13.
- TEP 9: PLACE THE REMAINING LIFTS OF HMA S0.375 IN THE PAVEMENT "CUTOUT". THE FIRST PAVEMENT LIFT SHALL BE  $1\frac{1}{4}$ " THICK. ADDITIONAL LIFTS SHALL BE  $1\frac{1}{4}$ " TO  $2\frac{1}{2}$ " THICK. MATCH THE ELEVATION OF THE EXISTING PAVEMENT. (REFER TO SHEET S-2 APJ BITUMINOUS CONCRETE PLACEMENT REQUIREMENTS).
- STEP 10: MILL ROADWAY AND BRIDGE PAVEMENT TO SPECIFIED DEPTHS.
- STEP 11: PAVE TOP COURSE ON ROADWAY AND BRIDGE.

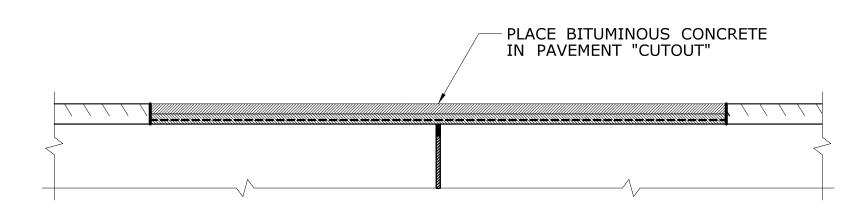


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 	- THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	NOT TO SCALE	DEPARTMENT OF TRANSPORTATION	APPROVED BY:	MILLING AND RESURFACING OF INTERSTATE 91	BRIDGE NO. 01687 JOINT SEAL DETAILS 1	SHEET NO.
REV. DATE REVISION DESCRIPTION	SHEET NO. Plotted Date: 12/12/2014		Filename:\S-4_sb_00630702_Bridge No. 01687_Joint_Seal_Details 1.dgn	***		JOINI SLAL DETAILS I	



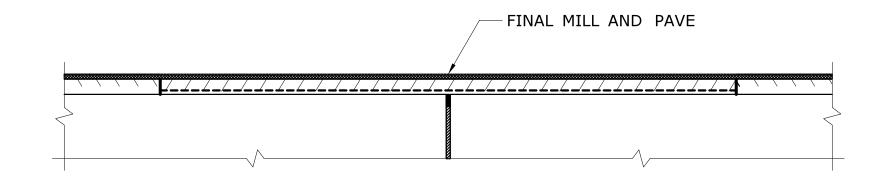


## **PAVEMENT REMOVAL (STEPS 1-6)**



## PLACE PAVEMENT IN "CUTOUT" (STEP 7)



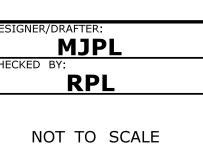


## FINAL MILL AND PAVE (STEP 9)

### SUGGESTED SEQUENCE OF WORK

- STEP 1: CONTRACTOR SHALL PERFORM AN EXPLORATION TO DETERMINE THE LOCATION OF THE EXPANSION JOINT BETWEEN THE GIRDERS AT PIERS 3 AND 4 AS WELL AS BETWEEN THE GIRDER AT PIER 6 AND THE ADJACENT SLAB.
- STEP 2: SAW-CUT BITUMINOUS PAVEMENT TO THE CONCRETE SLAB. EACH SAW-CUT LINE SHALL BE 3' FROM THE CENTERLINE OF THE EXISTING JOINT. THE SAW-CUT SHALL NOT DAMAGE THE EXISTING DECK SLAB.
- STEP 3: REMOVE EXISTING PAVEMENT MATERIAL WITHIN THE LIMITS SHOWN ON THE PLANS. TO BE PAID FOR UNDER ITEM "REMOVAL OF HMA WEARING SURFACE".
- STEP 4: INSTALL EMSEAL JOINT SEAL ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND REQUIREMENTS. TO BE PAID FOR UNDER ITEM "REPLACE JOINT SEAL".
- STEP 5: PLACE CRACK SEALANT ON THE VERTICAL EDGE OF PAVEMENT ALONG SAW-CUT LINES. FOR STAGED CONSTRUCTION, SEE DETAIL 'K' ON SHEET S-13.
- STEP 6: INSTALL WATERPROOFING MEMBRANE (WOVEN GLASS FABRIC) ON THE TOP OF THE DECK WITHIN THE LIMITS SHOWN. SEE DETAIL 'J' ON SHEET S-13.
- STEP 7: PLACE HMA S0.375 IN THE PAVEMENT "CUTOUT". THE FIRST PAVEMENT LIFT SHALL BE  $1\frac{1}{4}$ " THICK. ADDITIONAL LIFTS SHALL BE  $1\frac{1}{4}$ " TO  $2\frac{1}{2}$ " THICK. MATCH THE ELEVATION OF THE EXISTING PAVEMENT. (REFER TO GENERAL NOTES APJ BITUMINOUS CONCRETE PLACEMENT REQUIREMENTS).
- STEP 8: MILL AND PAVE ROADWAY.

-	-	-	-		THE INFORMATION, INCLUDING ESTIMATED
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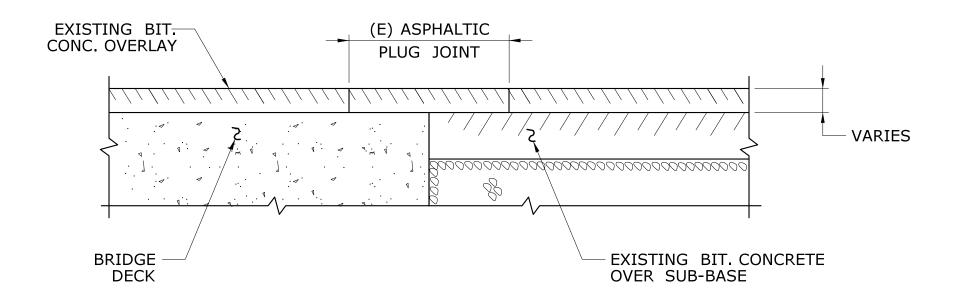
PAVEMENT PRESERVATION
MILLING AND RESURFACING
OF INTERSTATE 91

CITY OF HARTFORD TOWN OF WINDSOR

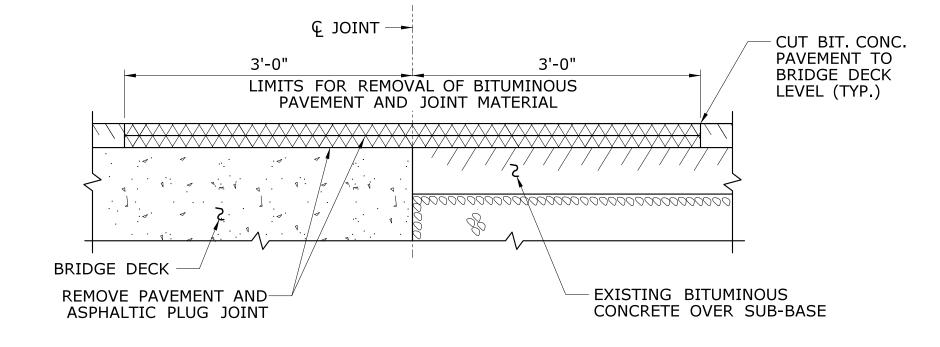
BRIDGE NO. 01687
JOINT SEAL DETAILS 2

S-5

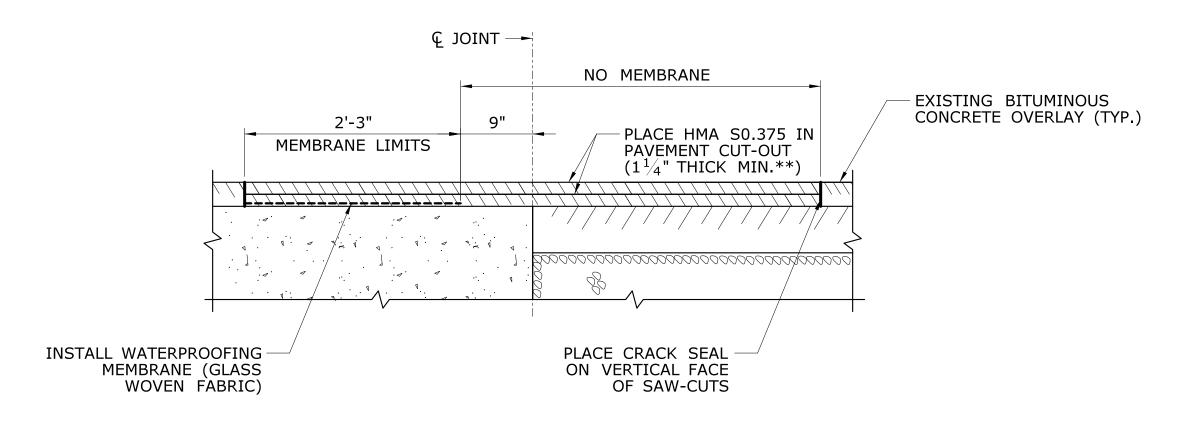
63-702



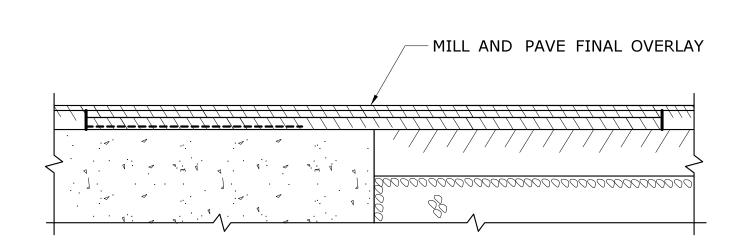
## EXISTING CONDITION (NO ROADWAY SLAB OR APPROACH SLAB EXISTS)



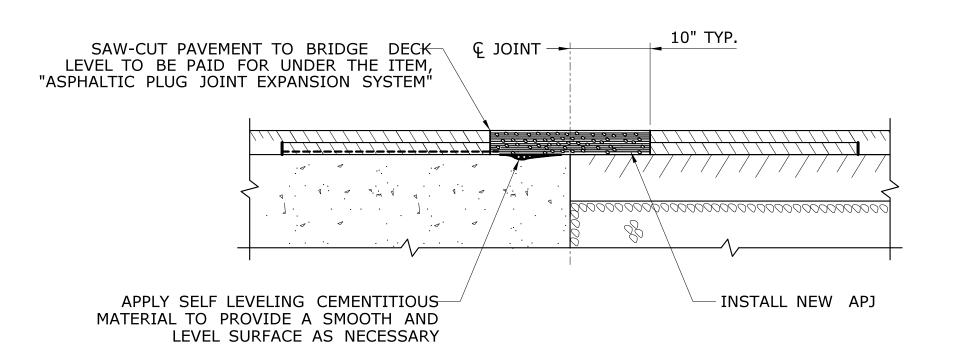
## JOINT AND PAVEMENT REMOVAL (STEPS 1-3)



## PLACEMENT OF PAVEMENT IN JOINT CUTOUT (STEPS 4-7)



## MILLING AND PAVING (STEP 8 & 9)



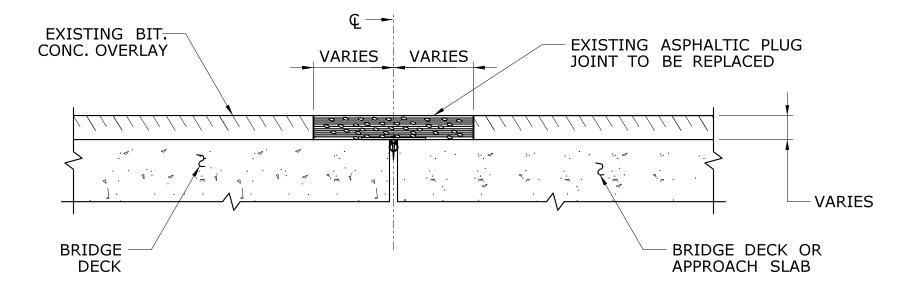
## FINAL CONDITION (STEPS 10 & 11)

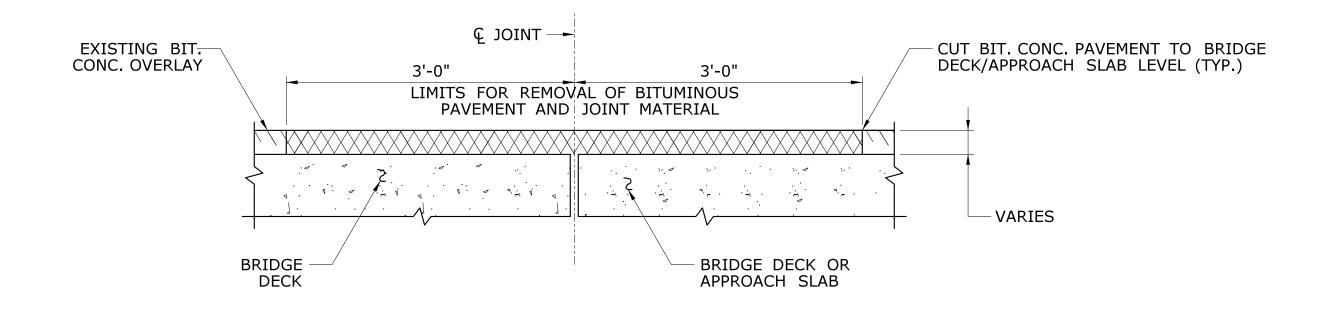
## SUGGESTED SEQUENCE OF WORK

- STEP 1: CONTRACTOR SHALL PERFORM AN EXPLORATION AT THE GUTTERLINE TO DETERMINE THE DEPTH OF PAVEMENT AND THE LOCATION OF THE DECK END (CENTERLINE OF PROPOSED JOINT) BEFORE PROCEEDING TO STEP 2.
- STEP 2: SAW-CUT BITUMINOUS PAVEMENT ON BOTH SIDES OF EXISTING JOINT FOR PAVEMENT SAW-CUT. EACH SAW-CUT LINE SHALL BE 3' FROM THE CENTERLINE OF THE EXISTING JOINT. SAW-CUT SHALL NOT DAMAGE EXISTING DECK OR APPROACH SLAB.
- STEP 3: REMOVE EXISTING PAVEMENT MATERIAL AND JOINT MATERIAL INCLUDING BACKING PLATE WITHIN THE LIMITS SHOWN. REMOVAL OF PAVEMENT TO BE PAID FOR UNDER ITEM "REMOVAL OF HMA WEARING SURFACE".
- STEP 4: REPAIR DETERIORATED CONCRETE AS DIRECTED BY THE ENGINEER. WHEN CONCRETE REPAIRS ARE REQUIRED, DETAIL 'E' ON SHEET S-8 SHALL BE USED IN LIEU OF DETAIL 'C' ON THIS SHEET.
- STEP 5: INSTALL WATERPROOFING MEMBRANE (WOVEN GLASS FABRIC) ON THE TOP DECK AND APRROACH SLAB WITHIN THE LIMITS SHOWN. SEE DETAIL 'J' ON SHEET S-13.
- STEP 6: PLACE CRACK SEALANT ON VERTICAL EDGE OF PAVEMENT ALONG SAW-CUT LINES. FOR STAGED CONSTRUCTION SEE DETAIL 'K' ON SHEET S-13.
- STEP 7: PLACE HMA S0.375 IN THE PAVEMENT "CUT-OUT". THE FIRST PAVEMENT LIFT SHALL BE  $1\frac{1}{4}$ " THICK. ADDITIONAL LIFTS SHALL BE  $1\frac{1}{4}$ " TO  $2\frac{1}{2}$ " THICK. MATCH THE ELEVATION OF THE EXISTING PAVEMENT. (REFER TO GENERAL NOTES APJ BITUMINOUS CONCRETE PLACEMENT REQUIREMENTS).
- STEP 8: MILL ROADWAY AND BRIDGE PAVEMENT TO SPECIFIED DEPTHS.
- STEP 9: PAVE TOP COURSE ON ROADWAY AND BRIDGE.
- STEP 10: CUT PAVEMENT FULL DEPTH AT 10" FROM THE CENTER OF THE JOINT (BOTH SIDES OF JOINT) AND REMOVE ALL PAVEMENT MATERIAL BETWEEN THE SAW-CUTS.
- STEP 11: INSTALL FINAL ASPHALTIC PLUG JOINT SYSTEM.

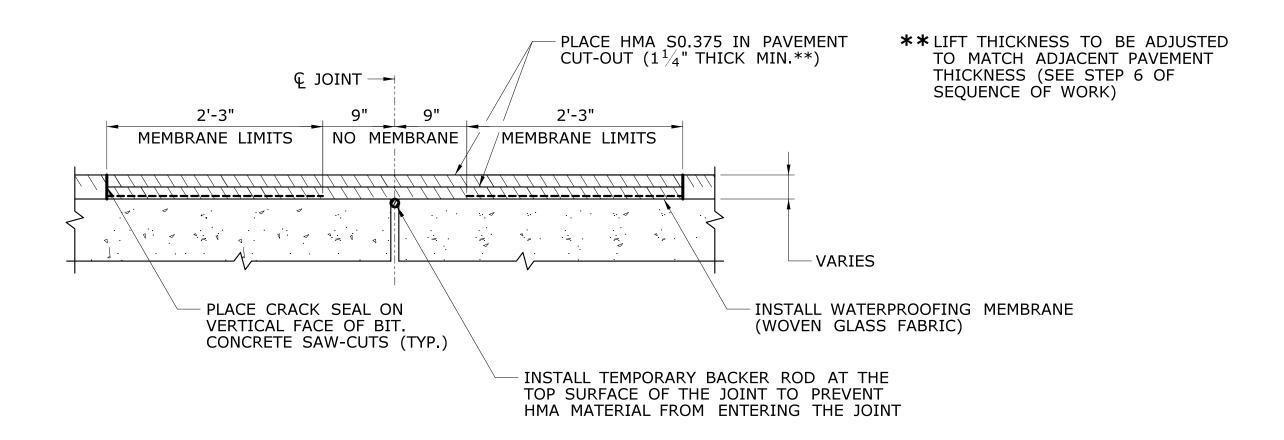
## SECTION - INSTALLATION OF ASPHALTIC PLUG JOINT C WITHOUT BRIDGING PLATE (MILL & PAVE) -

		DESIGNER/DRAFTER:		SIGNATURE/	PROJECT TITLE:	TOWN:	PROJECT NO.
	- THE INFORMATION, INC	LUDING ESTIMATED MJPL		BLOCK:	DAVEMENT DRECEDVATION	CITY OF HARTFORD	63-702
	- QUANTITIES OF WORK, SHEETS IS BASED ON	LIMITED CHECKED BY:	STATE OF CONNECTICUT	OFFICE OF ENGINEERING	PAVEMENT PRESERVATION	TOWN OF WINDSOR	DRAWING NO.
	INVESTIGATIONS BY TI	HE STATE AND IS TO INDICATE  RPL	STATE OF CONNECTICOT		MILLING AND RESURFACING		<b>S-6</b>
	THE CONDITIONS OF A	CTUAL QUANTITIES	DEPARTMENT OF TRANSPORTATION	APPROVED BY:	INITIATING AND KESUKFACTING	DRAWING TITLE:	
	OF WORK WHICH WILI	BE REQUIRED.	DEPARTMENT OF TRANSPORTATION		OF INTERSTATE 91	ASPHALTIC PLUG EXP.	SHEET NO.
	-	NOT TO SCALE		The state of the s	OF INTERSTATE 91		
REV DATE REVISION DESCRIPTION	SHEET NO Plotted Date: 12/12/20	14	Filename: \S-6 sh 00630702 Asphaltic Plug Toint Details 1 dgn			JOINT SYSTEM DETAILS	<b>_</b>

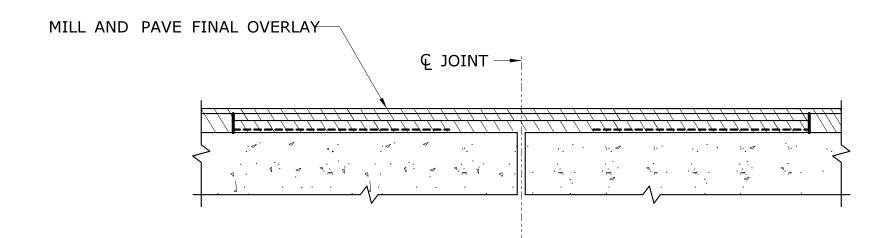




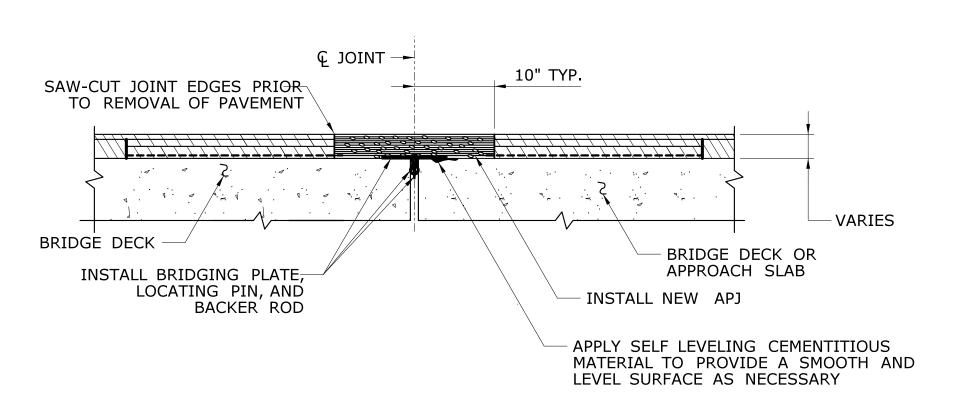
### **JOINT AND PAVEMENT REMOVAL (STEPS 1-3)**



## PLACEMENT OF PAVEMENT IN CUTOUT (STEPS 4-8)



## MILLING AND PAVING (STEPS 9 & 10)



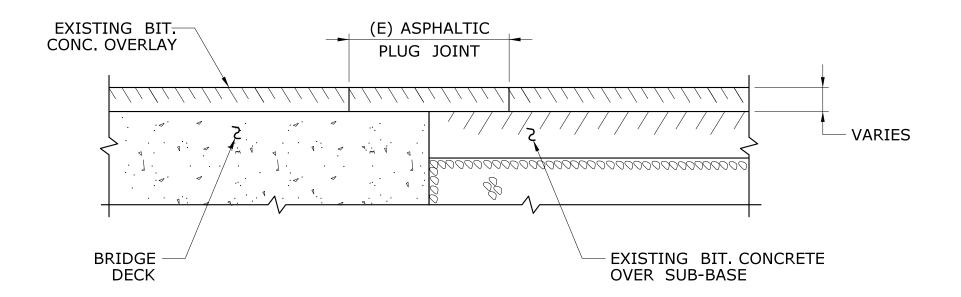
## FINAL CONDITION (STEPS 11 & 12)

## SUGGESTED SEQUENCE OF WORK

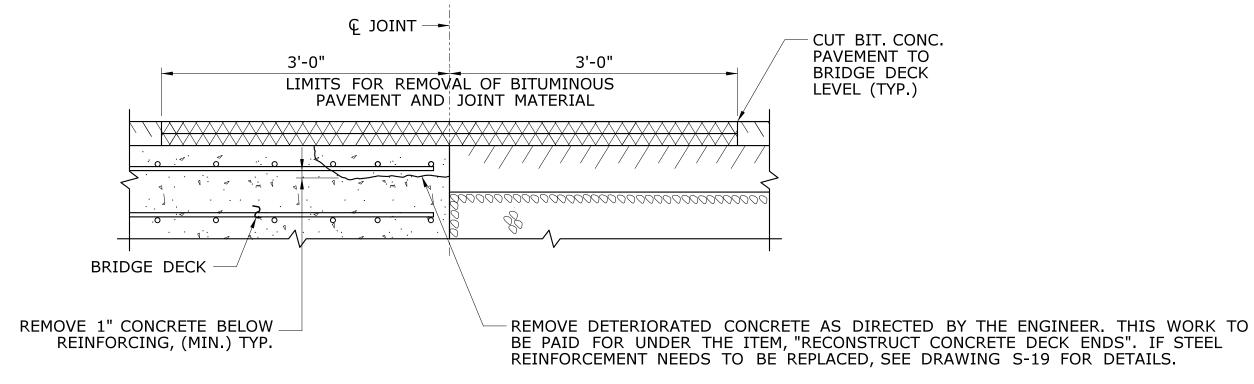
- STEP 1: CONTRACTOR SHALL PERFORM AN EXPLORATION AT THE GUTTERLINE TO DETERMINE THE DEPTH OF PAVEMENT AND THE LOCATION OF THE DECK END (CENTERLINE OF PROPOSED JOINT) BEFORE PROCEEDING TO STEP 2.
- STEP 2: SAW-CUT BITUMINOUS PAVEMENT ON BOTH SIDES OF EXISTING JOINT FOR PAVEMENT SAW-CUT. EACH SAW-CUT LINE SHALL BE 3' FROM THE CENTERLINE OF THE EXISTING JOINT. SAW-CUT SHALL NOT DAMAGE EXISTING DECK OR APPROACH SLAB.
- STEP 3: REMOVE EXISTING PAVEMENT MATERIAL AND JOINT MATERIAL INCLUDING BACKING PLATE WITHIN THE LIMITS SHOWN.
- STEP 4: INSTALL TEMPORARY BACKER ROD FLUSH WITH THE BRIDGE DECK AND APPROACH SLAB.
- STEP 5: REPAIR ANY DETERIORATED CONCRETE AS DIRECTED BY THE ENGINEER. WHEN CONCRETE REPAIRS ARE REQUIRED, DETAIL 'F' ON SHEET 9 SHALL BE USED IN LIEU OF DETAIL 'D' ON THIS SHEET.
- STEP 6: INSTALL WATERPROOFING MEMBRANE (WOVEN GLASS FABRIC) ON THE TOP OF THE DECK AND APRROACH SLAB WITHIN THE LIMITS SHOWN. SEE DETAIL 'J' ON SHEET S-13.
- STEP 7: PLACE CRACK SEALANT ON VERTICAL EDGE OF PAVEMENT ALONG SAW-CUT LINES. FOR STAGED CONSTRUCTION, SEE DETAIL 'K' ON SHEET S-13.
- STEP 8: PLACE HMA S0.375 IN THE PAVEMENT "CUT-OUT". THE FIRST PAVEMENT LIFT SHALL BE  $1\frac{1}{4}$ " THICK. ADDITIONAL LIFTS SHALL BE  $1\frac{1}{4}$ " TO  $2\frac{1}{2}$ "THICK. MATCH THE ELEVATION OF THE EXISTING PAVEMENT. (REFER TO GENERAL NOTES APJ BITUMINOUS CONCRETE PLACEMENT REQUIREMENTS).
- STEP 9: MILL ROADWAY AND BRIDGE PAVEMENT TO SPECIFIED DEPTHS.
- STEP 10: PAVE TOP COURSE ON ROADWAY AND BRIDGE.
- STEP 11: CUT PAVEMENT FULL DEPTH AT 10" FROM THE CENTER OF THE JOINT (BOTH SIDES OF JOINT) AND REMOVE ALL PAVEMENT MATERIAL BETWEEN THE SAW-CUTS.
- STEP 12: INSTALL FINAL ASPHALTIC PLUG JOINT SYSTEM.

## SECTION - INSTALLATION OF ASPHALTIC PLUG JOINT WITH BRIDGING PLATE

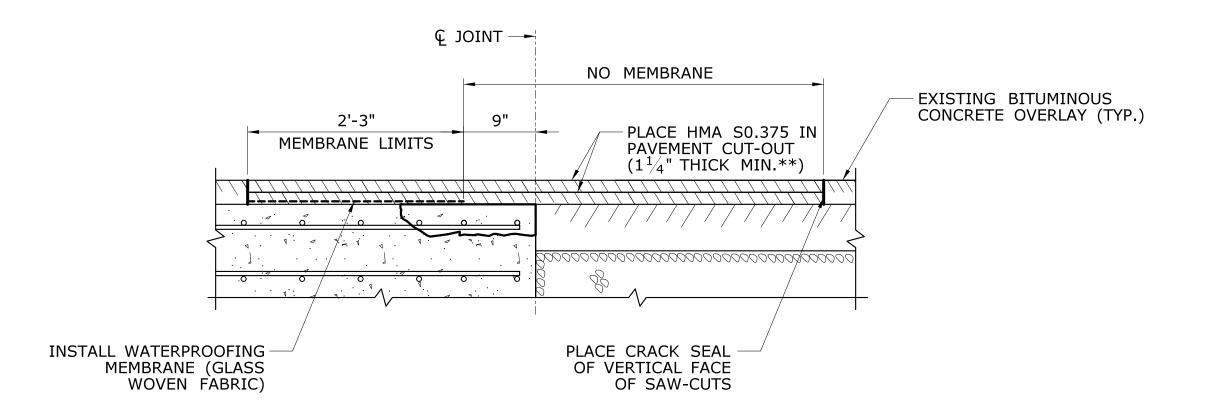
THE INFORMATION, INCLUDING QUANTITIES OF WORK, SHOWI	DESIGNER/DRAFTER:  STIMATED DN THESE CHECKED BY:	CONNECTICITY OF CONNECTICITY OF SOLIT	SIGNATURE/ BLOCK:  OFFICE OF ENGINEERING	PROJECT TITLE:  PAVEMENT PRESERVATION	CITY OF HARTFORD AND TOWN OF WINDSOR	PROJECT NO.  063-702  DRAWING NO.
INVESTIGATIONS BY THE STA IN NO WAY WARRANTED TO THE CONDITIONS OF ACTUAL	AND IS DICATE JANTITIES RPL	DEPARTMENT OF TRANSPORTATION		<b>MILLING AND RESURFACING</b>	DRAWING TITLE:	<b>S-7</b>
OF WORK WHICH WILL BE RE	NOT TO SCALE	Filename:\S-7_sb_00630702_Asphaltic_Plug_Joint_Details_2.dgn	Tooth	OF INTERSTATE 91	ASPHALTIC PLUG EXP. JOINT SYSTEM DETAILS	SHEET NO.



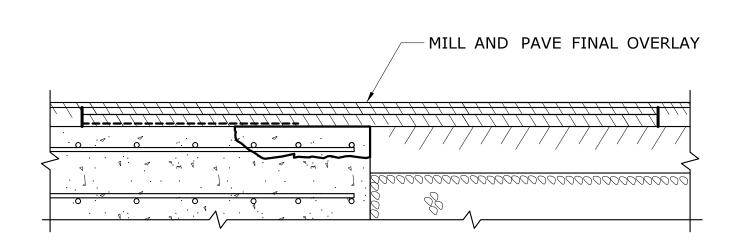
## EXISTING CONDITION (NO ROADWAY SLAB OR APPROACH SLAB EXISTS)



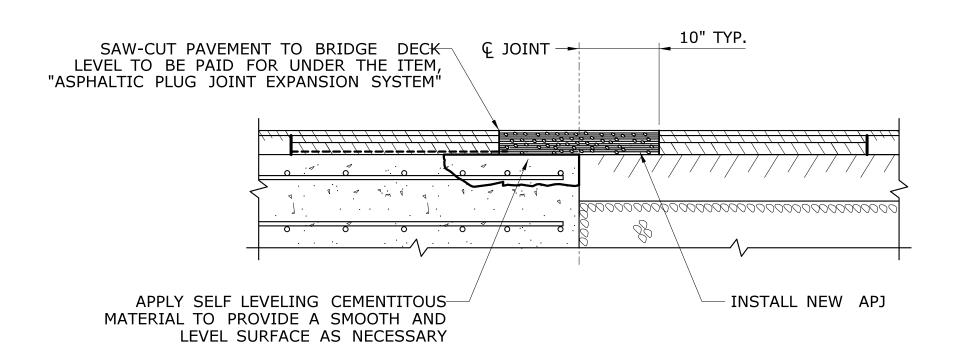
## JOINT AND PAVEMENT REMOVAL (STEPS 1-3)



## PLACEMENT OF PAVEMENT IN JOINT CUTOUT (STEPS 4-7)



## MILLING AND PAVING (STEP 8 & 9)



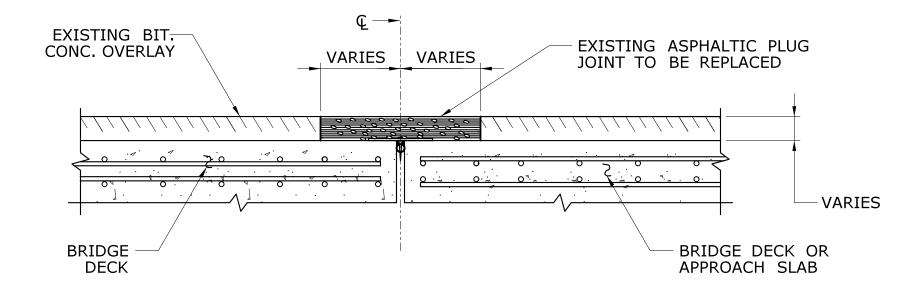
## FINAL CONDITION (STEPS 10 & 11)

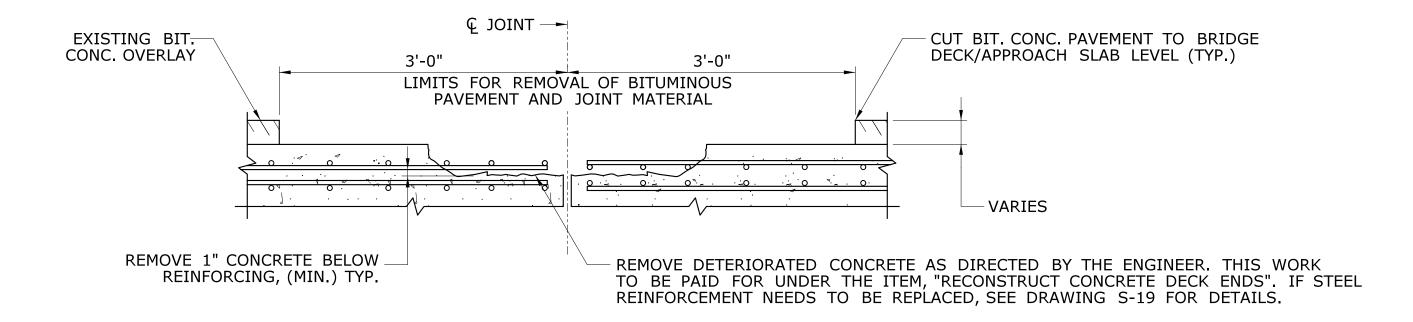
### SUGGESTED SEQUENCE OF WORK

- STEP 1: CONTRACTOR SHALL PERFORM AN EXPLORATION AT THE GUTTERLINE TO DETERMINE THE DEPTH OF PAVEMENT AND THE LOCATION OF THE DECK END (CENTERLINE OF PROPOSED JOINT) BEFORE PROCEEDING TO STEP 2.
- STEP 2: SAW-CUT BITUMINOUS PAVEMENT ON BOTH SIDES OF EXISTING JOINT FOR PAVEMENT SAW-CUT. EACH SAW-CUT LINE SHALL BE 3' FROM THE CENTERLINE OF THE EXISTING JOINT. SAW-CUT SHALL NOT DAMAGE EXISTING DECK OR APPROACH SLAB.
- STEP 3: REMOVE EXISTING PAVEMENT MATERIAL AND JOINT MATERIAL INCLUDING BACKING PLATE WITHIN THE LIMITS SHOWN.
- STEP 4: REPAIR ANY DETERIORATED CONCRETE AS DIRECTED BY THE ENGINEER. WHEN THE STEEL REINFORCEMENT HAS SECTION LOSS IN EXCESS OF 20% OF THE CROSS-SECTIONAL AREA, REPLACE THE STEEL REINFORCEMENT IN ACCORDANCE WITH THE DETAILS AS SHOWN IN DETAIL 'H' ON SHEET S-13. REPAIR OF DETERIORATED CONCRETE TO BE PAID UNDER ITEM "RECONSTRUCT CONCRETE DECK ENDS".
- STEP 5: INSTALL WATERPROOFING MEMBRANE (WOVEN GLASS FABRIC) ON THE TOP DECK AND APRROACH SLAB WITHIN THE LIMITS SHOWN. SEE DETAIL 'J' ON SHEET S-13.
- STEP 6: PLACE CRACK SEALANT ON VERTICAL EDGE OF PAVEMENT ALONG SAW-CUT LINES. FOR STAGED CONSTRUCTION, SEE DETAIL 'K' ON SHEET S-13.
- STEP 7: PLACE HMA S0.375 IN THE PAVEMENT "CUT-OUT". THE FIRST PAVEMENT LIFT TO SHALL BE  $1\frac{1}{4}$ " THICK. ADDITIONAL LIFTS SHALL BE  $1\frac{1}{4}$ " TO  $2\frac{1}{2}$ " THICK. MATCH THE ELEVATION OF THE EXISTING PAVEMENT. (REFER TO GENERAL NOTES APJ BITUMINOUS CONCRETE PLACEMENT REQUIREMENTS).
- STEP 8: MILL ROADWAY AND BRIDGE PAVEMENT TO SPECIFIED DEPTHS.
- STEP 9: PAVE TOP COURSE ON ROADWAY AND BRIDGE.
- STEP 10: CUT PAVEMENT FULL DEPTH AT 10" FROM THE CENTER OF THE JOINT (BOTH SIDES OF JOINT) AND REMOVE ALL PAVEMENT MATERIAL BETWEEN THE SAW-CUTS.
- STEP 11: INSTALL FINAL ASPHALTIC PLUG JOINT SYSTEM.

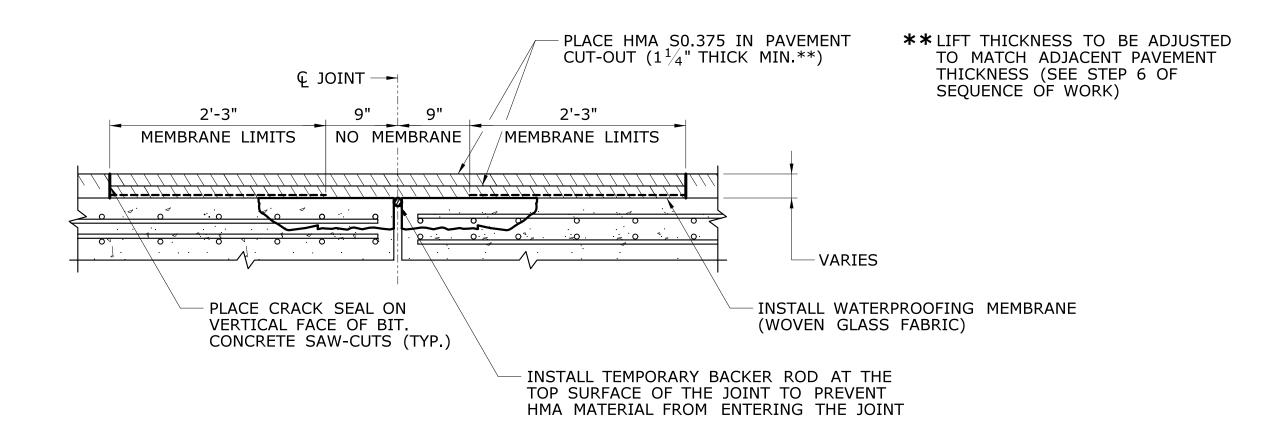
## SECTION - INSTALLATION OF ASPHALTIC PLUG JOINT E WITHOUT BRIDGING PLATE (MILL & PAVE) -

	THE INFORMATION, INCLUDING ESTIMATED OUANTITIES OF WORK, SHOWN ON THESE	DESIGNER/DRAFTER:  MJPL  CHECKED BY:	CONNECTICO:	SIGNATURE/ BLOCK:	PROJECT TITLE:  PAVEMENT PRESERVATION	CITY OF HARTFORD	PROJECT NO. <b>63-702</b>
  	SHEETS IS BASED ON LIMITED  INVESTIGATIONS BY THE STATE AND IS  IN NO WAY WARRANTED TO INDICATE  THE CONDITIONS OF ACTUAL QUANTITIES	RPL	TRANSPORT STATE OF CONTINENTS OF TRANSPORT	OFFICE OF ENGINEERING  APPROVED BY:	MILLING AND RESURFACING	TOWN OF WINDSOR  DRAWING TITLE:	DRAWING NO.  - S-8
	OF WORK WHICH WILL BE REQUIRED.	NOT TO SCALE	DEPARTMENT OF TRANSPORTATION	The set (	OF INTERSTATE 91	ASPHALTIC PLUG EXP. JOINT SYSTEM DETAILS 3	SHEET NO.
REV. DATE REVISION DESCRIPTION	SHEET NO. Plotted Date: 12/12/2014		Filename:\S-8_sb_00630702_Asphaltic_Plug_Joint_Details_3.dgn			DOTAL SISIEM DELATES 2	اح

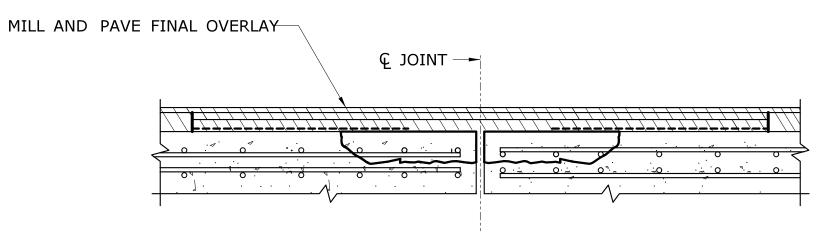




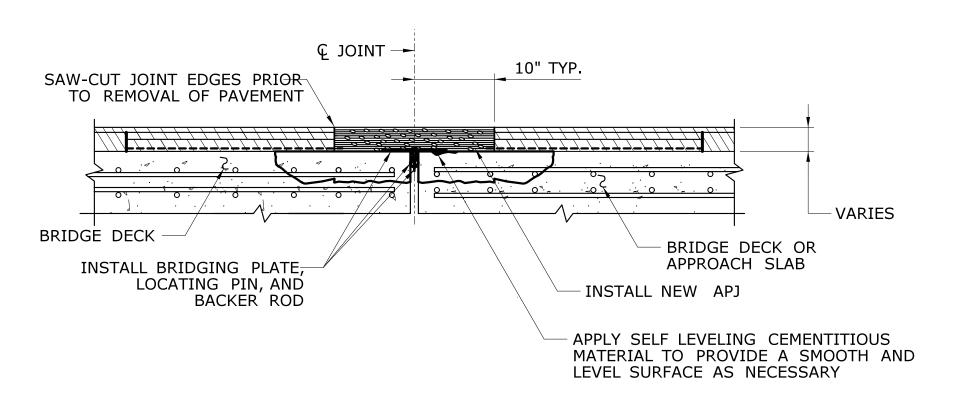
### **JOINT AND PAVEMENT REMOVAL (STEPS 1-3)**



## PLACEMENT OF PAVEMENT IN CUTOUT (STEPS 4-8)



### MILLING AND PAVING (STEPS 9 & 10)



## FINAL CONDITION (STEPS 11 & 12)

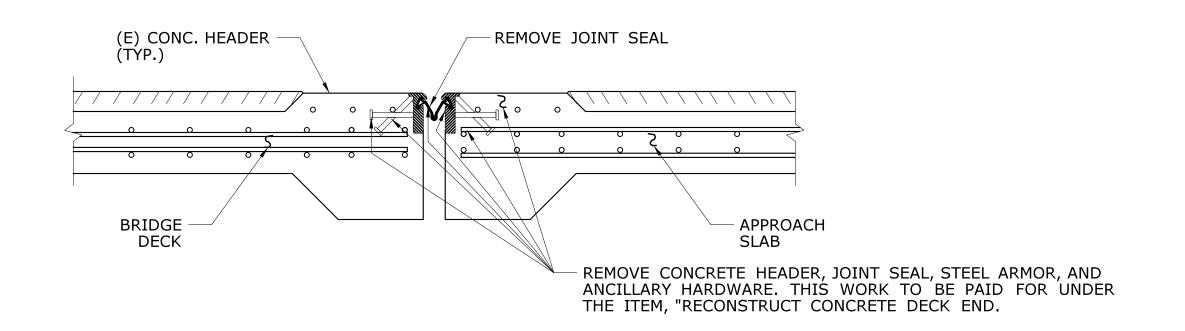
## SUGGESTED SEQUENCE OF WORK

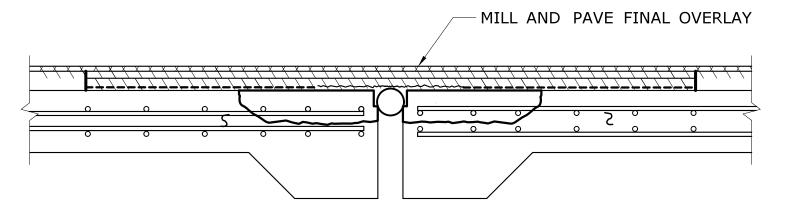
- STEP 1: CONTRACTOR SHALL PERFORM AN EXPLORATION AT THE GUTTERLINE TO DETERMINE THE DEPTH OF PAVEMENT AND THE LOCATION OF THE DECK END (CENTERLINE OF PROPOSED JOINT) BEFORE PROCEEDING TO STEP 2.
- STEP 2: SAW-CUT BITUMINOUS PAVEMENT ON BOTH SIDES OF EXISTING JOINT FOR PAVEMENT SAW-CUT. EACH SAW-CUT LINE SHALL BE 3' FROM THE CENTERLINE OF THE EXISTING JOINT. SAW-CUT SHALL NOT DAMAGE EXISTING DECK OR APPROACH SLAB.
- STEP 3: REMOVE EXISTING PAVEMENT MATERIAL AND JOINT MATERIAL INCLUDING BACKING PLATE WITHIN THE LIMITS SHOWN.
- STEP 4: INSTALL TEMPORARY BACKER ROD FLUSH WITH THE BRIDGE DECK AND APPROACH SLAB.
- STEP 5: REPAIR ANY DETERIORATED CONCRETE AS DIRECTED BY THE ENGINEER. WHEN THE STEEL REINFORCEMENT HAS SECTION LOSS IN EXCESS OF 20% OF THE CROSS-SECTIONAL AREA, REPLACE THE STEEL REINFORCEMENT IN ACCORDANCE WITH THE DETAILS AS SHOWN ON SHEETS S-11 AND S-12. REPAIR OF DETERIORATED CONCRETE TO BE PAID FOR UNDER ITEM "RECONSTRUCT CONCRETE DECK ENDS".
- STEP 6: INSTALL WATERPROOFING MEMBRANE (WOVEN GLASS FABRIC) ON THE TOP OF THE DECK AND APRROACH SLAB WITHIN THE LIMITS SHOWN. SEE DETAIL 'J' ON SHEET S-13.
- STEP 7: PLACE CRACK SEALANT ON VERTICAL EDGE OF PAVEMENT ALONG SAW-CUT LINES. FOR STAGED CONSTRUCTION, SEE DETAIL 'K' ON SHEET S-13.
- STEP 8: PLACE HMA S0.375 IN THE PAVEMENT "CUT-OUT". THE FIRST PAVEMENT LIFT TO SHALL BE  $1\frac{1}{4}$ ". ADDITIONAL LIFTS SHALL BE  $1\frac{1}{4}$ " TO  $2\frac{1}{2}$ ". MATCH THE ELEVATION OF THE EXISTING PAVEMENT. (REFER TO GENERAL NOTES - APJ BITUMINOUS CONCRETE PLACEMENT REQUIREMENTS).
- STEP 9: MILL ROADWAY AND BRIDGE PAVEMENT TO SPECIFIED DEPTHS.
- STEP 10: PAVE TOP COURSE ON ROADWAY AND BRIDGE.
- STEP 11: CUT PAVEMENT FULL DEPTH AT 10" FROM THE CENTER OF THE JOINT (BOTH SIDES OF JOINT) AND REMOVE ALL PAVEMENT MATERIAL BETWEEN THE SAW-CUTS.
- STEP 12: INSTALL FINAL ASPHALTIC PLUG JOINT SYSTEM.

## SECTION - INSTALLATION OF ASPHALTIC PLUG JOINT WITH BRIDGING PLATE

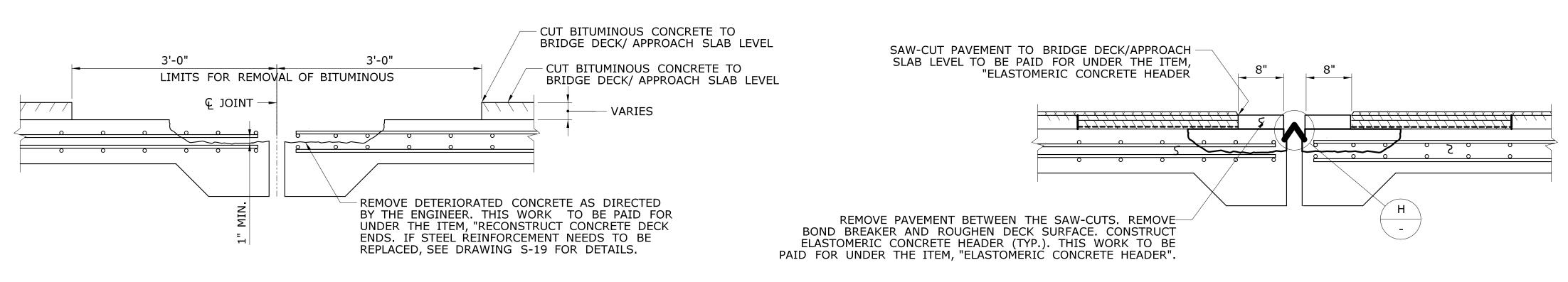


  	THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS	MJPL CHECKED BY:  RPL	STATE OF CONNECTICUT	SIGNATURE/ BLOCK:  OFFICE OF ENGINEERING		CITY OF HARTFORD TOWN OF WINDSOR	063-702  DRAWING NO.
	- THE CONDITIONS OF ACTUAL QUANTITIES		DEPARTMENT OF TRANSPORTATION	APPROVED BY:	MILLING AND RESURFACING	DRAWING TITLE:	3-9
	_ OF WORK WHICH WILL BE REQUIRED.		DEFARIMENT OF TRANSPORTATION	-3 -1/3	OF INTERSTATE 91	ASPHALTIC PLUG EXP.	SHEET NO.
	-	NOT TO SCALE		1 well	OI INTERSTALE 31	JOINT SYSTEM DETAILS 4	4
REV. DATE REVISION DESCRIPTION	SHEET NO. Plotted Date: 12/12/2014		Filename:\S-9_sb_00630702_Asphaltic_Plug_Joint_Details_4.dgn			DOTAL SISIEM DELATES A	<b>~</b>



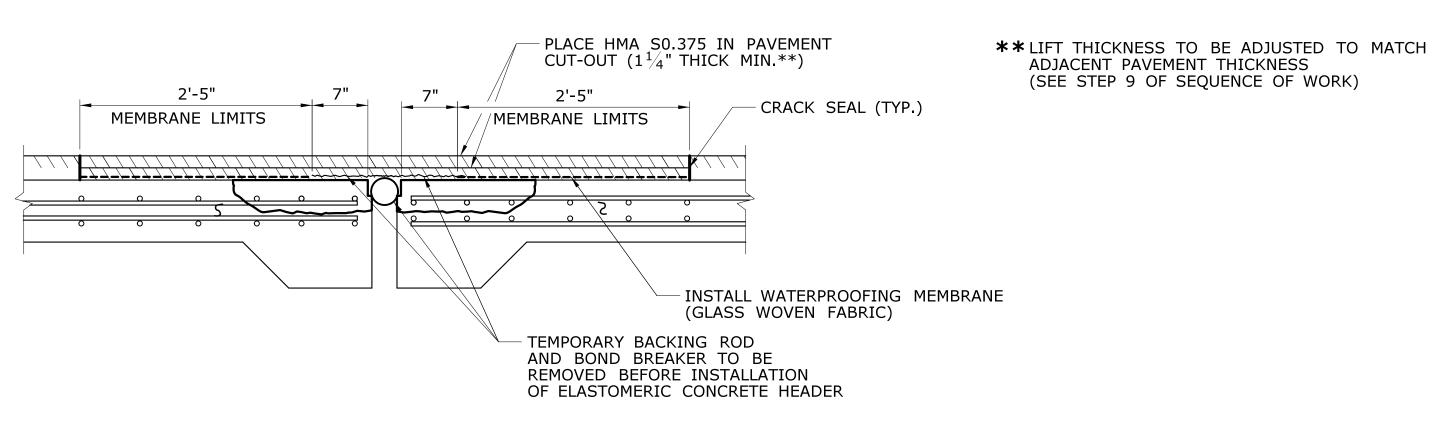


## PLACEMENT OF PAVEMENT IN CUTOUT (STEP 10)



### **HEADER AND PAVEMENT REMOVAL (STEPS 1-4)**

## PLACEMENT OF PAVEMENT IN CUTOUT (STEPS 11 TO 13)

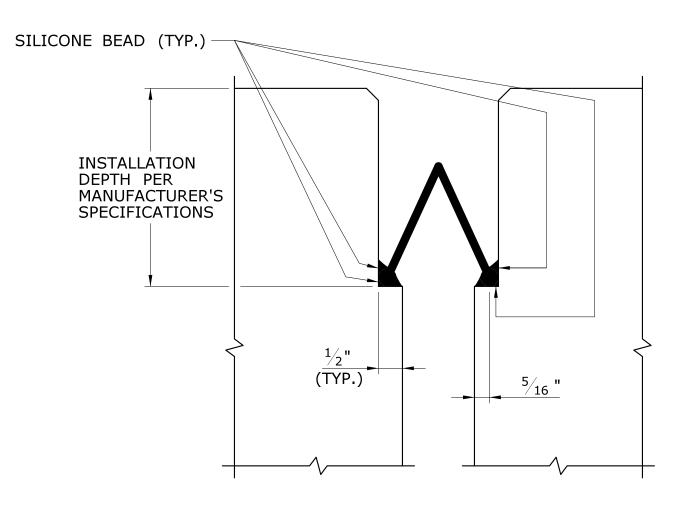


## PLACEMENT OF PAVEMENT IN CUTOUT (STEPS 5 TO 9)



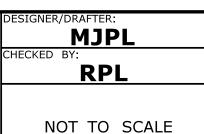
### SUGGESTED SEQUENCE OF WORK

- STEP 1: CONTRACTOR SHALL PERFORM AN EXPLORATION AT THE GUTTERLINE TO DETERMINE THE DEPTH OF PAVEMENT AND THE LOCATION OF THE DECK END (CENTERLINE OF THE PROPOSED JOINT) BEFORE PROCEEDING TO STEP 2.
- STEP 2: SAW-CUT BITUMINOUS PAVEMENT ON BOTH SIDES OF THE EXISTING JOINT FOR PAVEMENT CUT-OUT. EACH SAW CUT LINE SHALL BE 3' FROM THE END OF THE DECKS. SAW-CUT SHALL NOT DAMAGE EXISTING DECK.
- STEP 3: REMOVE EXISTING PAVEMENT MATERIAL WITHIN THE LIMITS SHOWN ON THE CONTRACT SHEET.
- STEP 4: REMOVE THE CONCRETE HEADER, JOINT SEAL, STEEL ARMOR AND ANY ANCILLARY HARDWARE. REMOVE SUFFICIENT CON-CRETE TO CREATE A 1" CLEARANCE BELOW THE TOP MAT OF THE STEEL REINFORCEMENT. REMOVE ANY ADDITIONAL DETERIORATED CONCRETE AS DIRECTED BY THE ENGINEER OR AS NECESSARY TO CREATE A "STEP" AS SHOWN IN DETAIL'H' ON SHEET S-13. IF THE STEEL REINFORCEMENT HAS SECTION LOSS IN EXCESS OF 20% OF THE CROSS-SECTIONALAREA, REPLACE THE STEEL REINFORCEMENT IN ACCORDANCE WITH THE DETAILS AS SHOWN ON SHEET S-11 AND S-12.
- STEP 5: PLACE CONCRETE IN THE HEADER BLOCKOUT TO THE BRIDGE DECK ELEVATION. CREATE A  $\frac{1}{2}$ " STEP AS SHOWN IN DETAIL H-13.
- STEP 6: INSTALL WATERPROOFING MEMBRANE (GLASS WOVEN FABRIC) ON THE TOP OF DECK WITHIN THE LIMITS SHOWN. SEE DETAIL 'J' ON SHEET S-13.
- STEP 7: INSTALL THE TEMPORARY BACKER ROD AND THE BOND BREAKER AT THE LOCATION OF THE PROPOSED ELASTO-MERIC CONCRETE HEADER. THIS WORK TO BE PAID FOR UNDER ITEM "ELASTOMERIC CONCRETE HEADER"
- STEP 8: PLACE CRACK SEALANT ON VERTICAL EDGE OF PAVEMENT ALONG SAW-CUT LINES. FOR STAGED CONSTRUCTION SEE DETAIL 'K' ON SHEET S-13.
- STEP 9: PLACE HMA S0.375 IN THE PAVEMENT CUTOUT. THE FIRST PAVEMENT LIFT SHALL BE  $1\frac{1}{4}$ " THICK. ADDITIONAL LIFTS SHALL BE  $1\frac{1}{4}$ " TO  $2\frac{1}{2}$ " THICK. MATCH THE ELEVATION OF THE EXISTING PAVEMENT. (REFER TO GENERAL NOTES - APJ BITUMINOUS CONCRETE PLACEMENT REQUIREMENTS)
- STEP 10: MILL AND PAVE THE FINAL OVERLAY.
- STEP 11: CUT PAVEMENT FULL DEPTH, 8" FROM BOTH DECK ENDS. REMOVE ALL PAVEMENT MATERIAL BETWEEN SAW-CUTS, THEN REMOVE THE TEMPORARY BACKER ROD AND THE BOND BREAKER. THIS WORK TO BE PAID FOR UNDER ITEM, "ELASTOMERIC CONCRETE HEADER".
- STEP 12: INSTALL THE PROPOSED ELASTOMERIC CONCRETE HEADER.
- STEP 13: INSTALL THE PREFORMED SILICONE JOINT SEAL. THIS WORK TO BE PAID FOR UNDER ITEM "PREFORMED SILICONE JOINT SEAL".

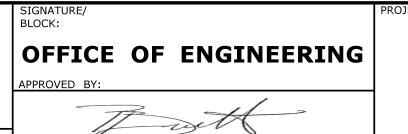


PREFORMED SILICONE JOINT SEAL

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-	-	-	_	THE INFORMATION, INCLUDING ESTIMATED
-	-	-	-	QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED
-	-	-	-	INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE
-		-	-	THE CONDITIONS OF ACTUAL QUANTITIES
-	-	-	-	OF WORK WHICH WILL BE REQUIRED.
_	-	-	_	
REV.	DATE	REVISION DESCRIPTION	SHEET NO	Plotted Date: 12/12/2014







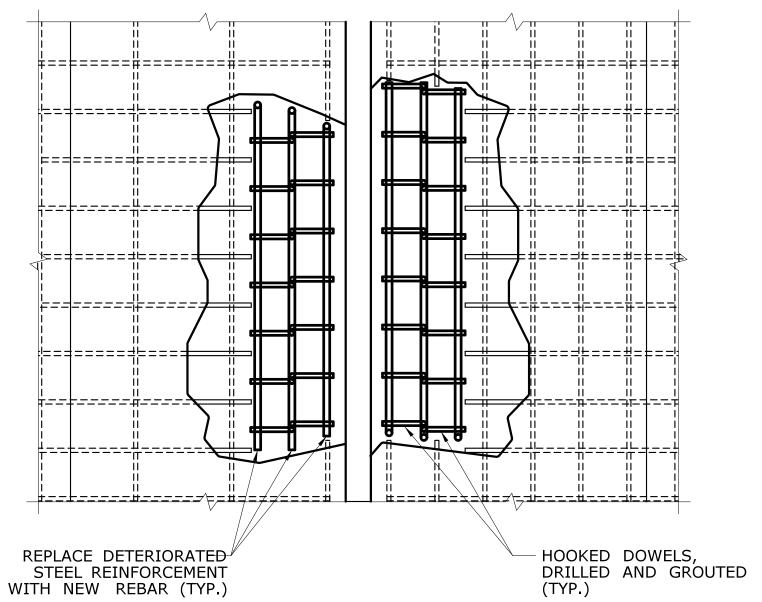
PAVEMENT PRESERVATION MILLING AND RESURFACING **OF INTERSTATE 91** 

CITY OF HARTFORD TOWN OF WINDSOR

S-10 HEET NO.

63-702

**BRIDGE NO. 05882 EXP. JOINT DETAILS** 



## NOTES ON STEEL REINFORCEMENT

NEW STEEL REINFORCEMENT WILL MATCH THE EXISTING REBAR FOR SIZE AND SPACING. THE CONTRACTOR MAY USE DRILLED AND GROUTED HOOKED DOWELS; REINFORCEMENT WITH COUPLERS; OR LAP SPLICES OF SUFFICIENT LENGTH.

DRILLED AND GROUTED DOWELS: DRILLED HOLES DIA. AND EMBEDMENT DEPTH PER THE MANUFACTURER'S SPECIFICATIONS TO OBTAIN 100% DEVELOPMENT. MINIMUM CONCRETE COVERAGE IS 2 INCHES. THE MINIMUM HORIZONTAL LENGTH OF THE HOOK IS AS FOLLOWS:

#4 - 6.0" #5 - 7.5" #6 - 9.0" #7 - 10.5" #8 - 12.0"

MINIMUM CONCRETE COVERAGE IS 2 INCHES. THE RESISTANCE OF A FULL-MECHANICAL CONNECTION SHALL NOT BE LESS THAN 125 PERCENT OF THE SPECIFIED YIELD STRENGTH OF THE BAR IN TENSION OR COMPRESSION, AS REQUIRED COUPLERS:

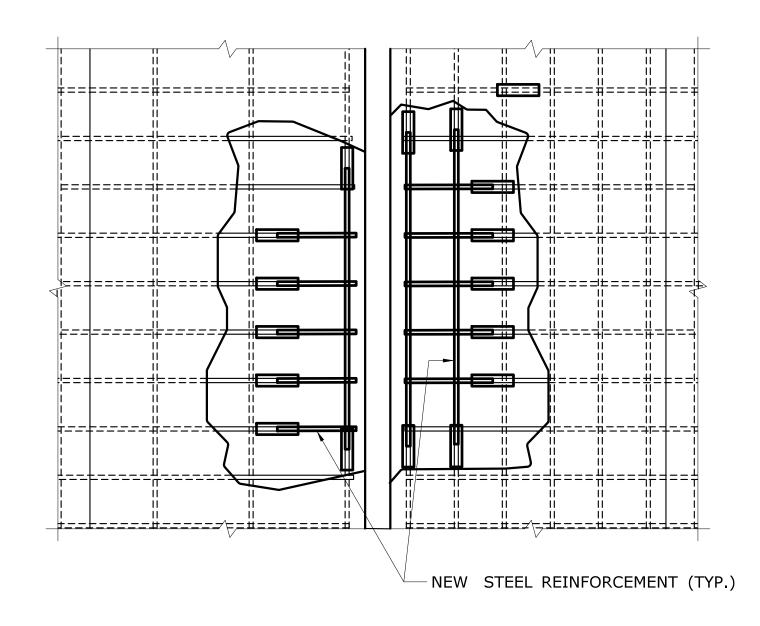
LAP SPLICES: MINIMUM LAP SPLICES ARE AS FOLLOWS: (CLASS C TENSION SPLICE) FOR REBAR SPACED LATERALLY 6 INCHES OR MORE:

> #4: 1'-5"" #5: 1'-9" #6: 2-1" #7: 2-5" #8: 2'-9"

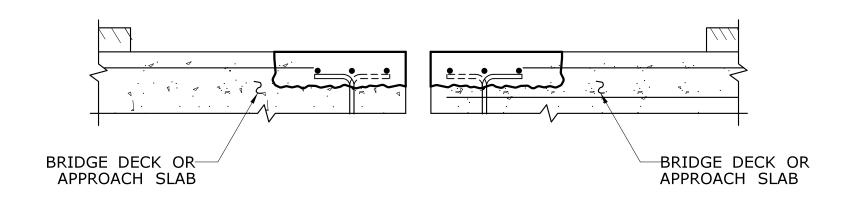
FOR REBAR SPACED LATERALLY LESS THAN 6 INCHES:

#5: 2'-2" #6: 2-7" #8: 4'-3"

STEEL REINFORCEMENT, REBAR COUPLERS, DRILLING AND GROUTING OF DOWELS TO BE PAID UNDER ITEM "RECONSTRUCT CONCRETE DECK ENDS".



## **PLAN**



**ELEVATION** 

DRILLED AND GROUTED DOWELS

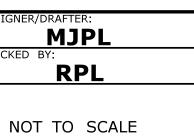
REINFORCEMENT COUPLER **4** BRIDGE DECK OR-- BRIDGE DECK APPROACH SLAB

**PLAN** 

**ELEVATION** 

REINFORCEMENT W/COUPLERS

					DE
-	-	-	-	THE INFORMATION, INCLUDING ESTIMATED	
-	-	-	-	QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED	C⊦
-	-	-	-	INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE	
-	-	-	-	THE CONDITIONS OF ACTUAL QUANTITIES	
-	-	-	-	OF WORK WHICH WILL BE REQUIRED.	ĺ
-	-	-	-		
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 12/12/2014	







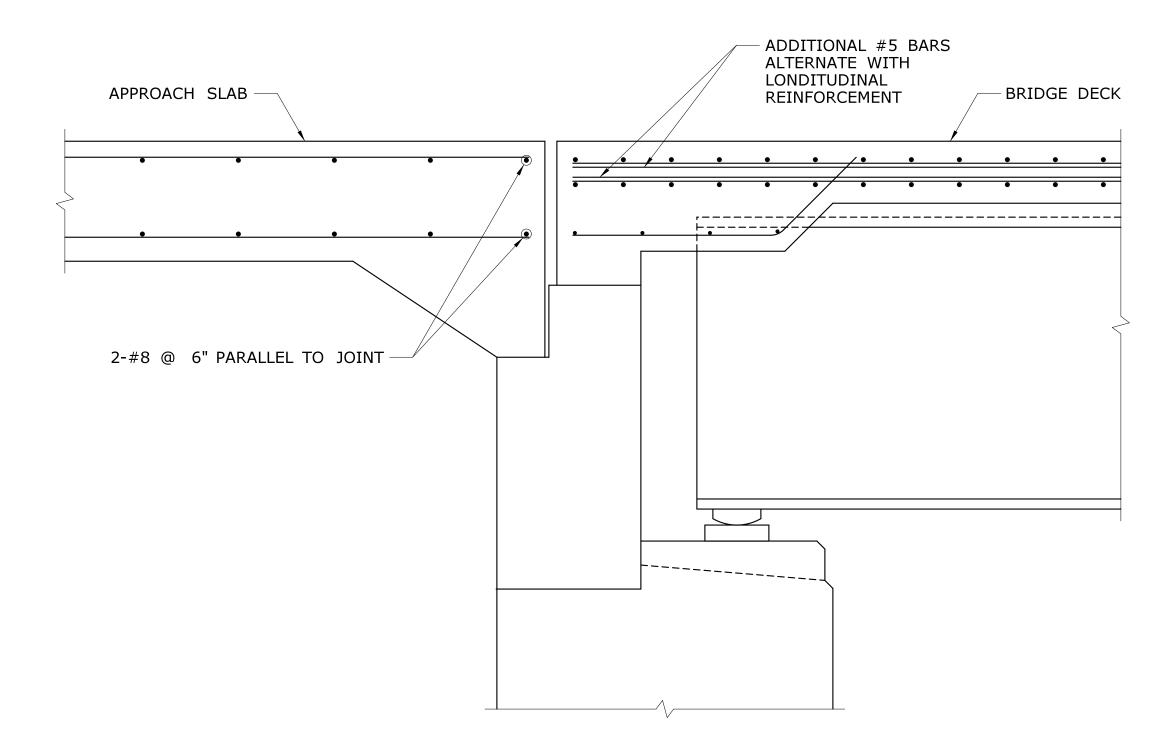
**PAVEMENT PRESERVATION** MILLING AND RESURFACING Of INTERSTATE 91

CITY OF HARTFORD TOWN OF WINDSOR

**S-11** DETERIORATED STEEL REINFORCEMENT DETAILS

63-702

Filename: ...\S-11\_sb\_00630702\_Deteriorated\_Steel\_Reinforcement\_Details.dgn



## EXISTING STEEL REINFORCEMENT IN ABUTMENT/APPROACH SLABS

MJPL

RPL

## EXISTING STEEL REINFORCEMENT IN ABUTMENTS/APPROACH SLABS

BBIDGE NO	APPROACH SLAB  TRANSVERSE				DECK SLAB TRANSVERSE			
BRIDGE NO.	LONGITUDINAL		TRANSVERSE		LONGITUDINAL		TRANSVERSE	
25252	TOP	ВОТТОМ	TOP	BOTTOM	TOP	ВОТТОМ	TOP	BOTTOM
05862	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 7"	#5 AT 6"	#5 AT 6'
25252	"O AT C"		WE AT 40!!	W5 47 40"	#5 X 7'-6"	#5 X 7'-6"		WE AT 61
05863	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 7"	#5 AT 6"	#5 AT 6'
05064	"O AT C"		WE AT 40!!	WE AT 40!!	#5 X 7'-6"	#5 X 7'-6"	WE AT 611	UE A T CII
05864	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 9.5"	#5 AT 6"	#5 AT 6"
05066	UO AT CII	UO AT CII	UE AT 421	UE AT 40!!	#5 X 10'-0"	#5 x 10"-0"	#5 AT C 5 !!	UE AT C E
05866	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 10.75"	#5 AT 6.5"	#5 AT 6.5
05.001.4	#0 AT CII	#0 AT CII	#F AT 12!!	#F AT 12!!	#5 X 10'-0"	#5 x 10"-0"	#F AT C F!!	#F A T C F
05881A	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 6"	#5 AT 6.5"	#5 AT 6.5
0E 991 B	#0 AT C!!	#8 AT 6"	#F AT 12!!	#5 AT 12"	#5 X 10'-0"	#5 x 10"-0"	#F AT C E!!	#F AT 6 F
05881B	#8 AT 6"	#8 AT 0	#5 AT 12"	#5 AT 12	#4 AT 12" #5 X 10'-0"	#5 AT 6" #5 x 10"-0"	#5 AT 6.5"	#5 AT 6.5
05000	#E II CHAD	E DAD @ 12"	2 #6	2 #6	1		#E AT 7!!	#E A T 7!!
05882	#5 U-SHAP	E BAR @ 12"	2 - #6 APPROACH SLAB	2 - #6	#4 AT 12" #5 X 13'-0"	#5 AT 9" #5 X 13'-0"	#5 AT 7"	#5 AT 7"
05024	#0 AT 6"	T				#5 AT 7"	#E AT 7"	#E A T 7!!
05924	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12" #5 X 7'-6"	#5 X 7'-6"	#5 AT 7"	#5 AT 7"
050764	NO ADDR	OACHCIAD	NO ADDD	DACHELAD			#F AT 6!!	#F A T C!!
05976A	NO APPRO	OACH SLAB	NO APPRO	DACH SLAB	#4 AT 12" #5 X 10'-0"	#5 AT 9" #5 X 10'-0"	#5 AT 6"	#5 AT 6"
05076B	NO APPROACH SLAB		NO APPROACH SLAB				#E AT 6"	#5 AT 6"
05976B					#4 AT 12" #5 X 10'-0"	#5 AT 9" #5 X 10'-0"	#5 AT 6"	#3 A I 6
05977A	NO APPROACH SLAB		NO APPROACH SLAB		#4 AT 12"	#5 X 10 -0 #6 AT 9"	#6 AT 6"	#6 AT 6"
03977A					#4 A1 12 #5 X 10'-0"	#5 X 10'-0"	#0 A1 0	#0 A 1 0
05977B	NO ADDD	OACH SLAB	NO APPROACH SLAB		#3 × 10 -0 #4 AT 12"	#5 X 10 -0 #6 AT 9"	#6 AT 6"	#6 AT 6"
03977B	NO APPN	UACH SLAB	NO APPRO	DACH SLAD	#4 A1 12 #5 X 10'-0"	#5 X 10'-0"	#0 A1 0	#0 A 1 0
05979A	NO ADDR	OACH SLAB	NO APPROACH SLAB		#4 AT 12"	#5 AT 9"	#6 AT 6"	#5 AT 6"
03979A	NO AFFIN	OACH SLAD	NO AFFIRE	DACITOLAD	#5 X 10'-0"	#5 X 10'-0"	#0 AT 0	#3 A1 0
05979B	NO APPROACH SLAB		NO APPROACH SLAB		#4 AT 12"	#5 AT 9"	#5 AT 6"	#5 AT 6"
039798	NO AFFIN	OACH SLAD	NO AFFIRE	DACITOLAD	#4 X1 12 #5 X 10'-0"	#5 X 10'-0"	#3 AT U	#3 AT 0
05994	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 9.5"	#5 AT 6"	#5 AT 6"
03994	#6 A1 0	#6 AT 0	#3 AT 12	#3 A1 12	#4 X1 12 #5 X 10'-0"	#5 x 10"-0"	#3 AT U	#3 A T U
05995	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 10.75"	#5 AT 6.5"	#5 AT 6.5
03333	#6 AT 0	#0 AT 0	#3 AT 12	#3 AT 12	#5 X 10'-0"	#5 x 10"-0"	#3 A1 0.3	π3 A1 0.3
06008	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 7"	#5 AT 7"	#5 AT 7"
00000	1107110	no At o	#37K1 12	1137(112	#5 X 7'-6"	#5 X 7'-6"	1137(17	1137(17
06040A	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 7"	#5 AT 6"	#5 AT 6"
00040/1	1107110	no / tro	#37K1 12	1137(112	#5 X 10'-0"	#5 x 10"-0"	1137110	1137110
06040B	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 10"	#5 AT 6"	#5 AT 6"
		1			#5 X 10'-0"	#5 x 10"-0"		
06151	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 7"	#5 AT 7"	#5 AT 7"
3333		1 1107110			#5 X 7'-6"	#5 X 7'-6"		1137117
06218	#9 AT 6"	#9 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 10"	#5 AT 7"	#5 AT 7"
		1 "37110			#5 X 10'-0"	#5 X 10'-0"		137(17
06219	#8 AT 6"	#8 AT 6"	#5 AT 12"	#5 AT 12"	#4 AT 12"	#5 AT 9"	#5 AT 6"	#5 AT 6"
		1 1107110			#5 X 10'-0"	#5 X 10'-0"		

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-	-	-	_		
REV.	DATE	REVISION DESCRIPTION	SHEET NO	Plotted Date: 12/12/2014	

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION NOT TO SCALE Filename: ...\S-12\_sb\_00630702\_Existing\_Deck\_End\_Steel\_Reinforcement.dgn

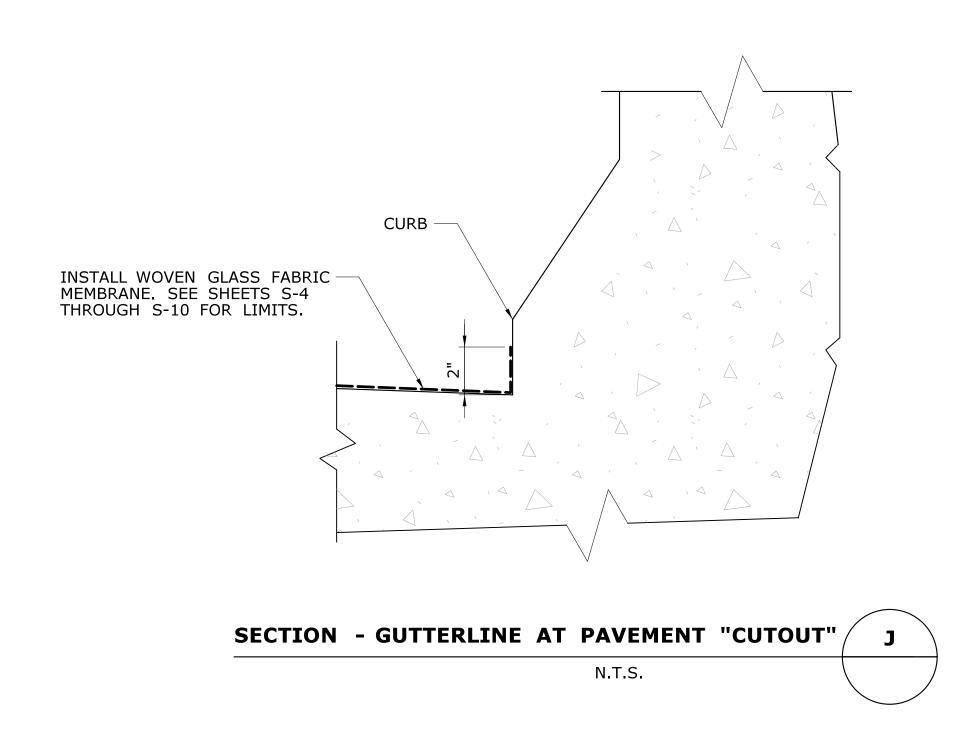


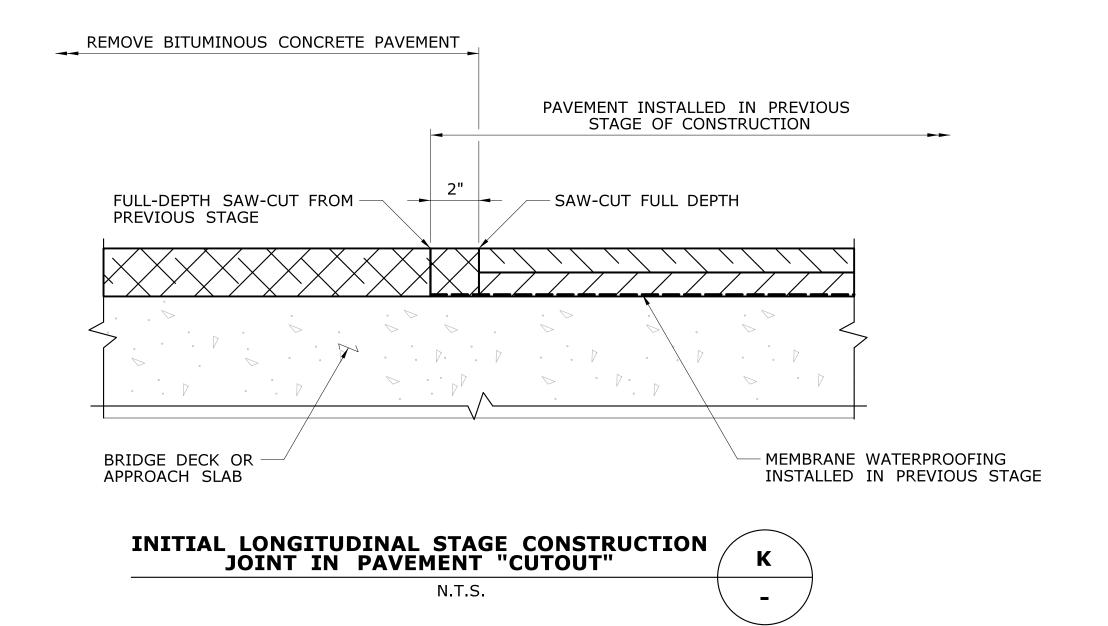
PAVEMENT PRESERVATION MILLING AND RESURFACING OF INTERSTATE 91

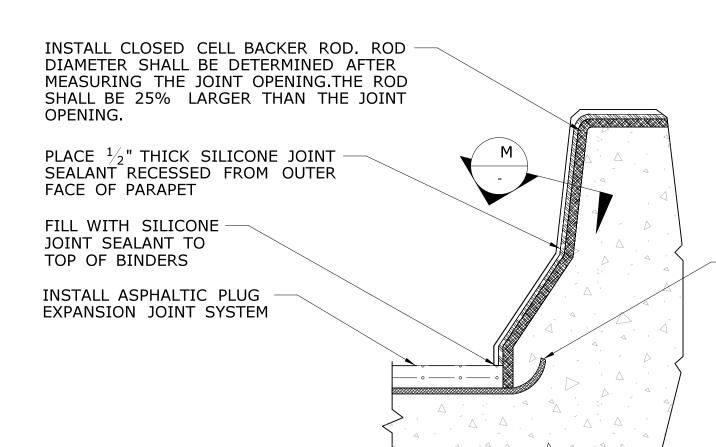
CITY OF HARTFORD TOWN OF WINDSOR

63-702 S-12

**EXISTING DECK END** STEEL REINFORCEMENT

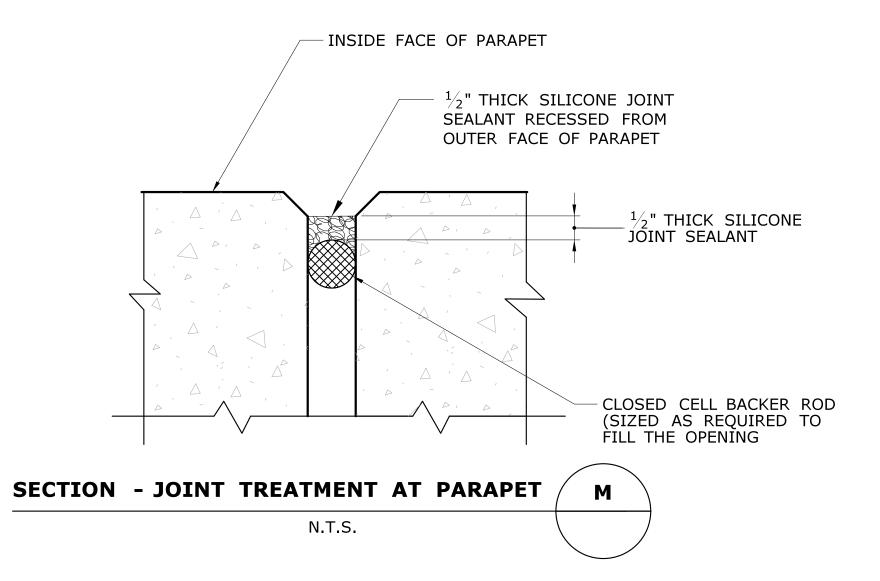






EXTEND BACKER ROD FOR ASPHALTIC PLUG EXPANSION JOINT SYSTEM BEYOND GUTTER AND TO A HEIGHT ABOVE THE WEARING SURFACE.





## NOTES FOR SEALING JOINTS

- 1. ANY EXISTING BACKER ROD AND JOINT SEALANT SHALL BE COMPLETELY REMOVED.
- 2. SURFACES OF CONCRETE ALONG JOINT SHALL BE CLEANED BY ABRASIVE BLAST CLEANING. SURFACES TO WHICH SILICONE SEALANT WILL ADHERE SHALL BE FREE OF DUST AND LOOSE OR DETERIORATED CONCRETE BEFORE INSTALLING BACKER ROD AND SILICONE JOINT SEAL.
- 3. COST FOR SEALING PARAPET JOINTS TO BE INCLUDED FOR PAYMENT WITH "ASPHALTIC PLUG EXPANSION JOINT SYSTEM".

			DESIGNER/DRAFTER:
		THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE	JPC
			JRH
		THE CONDITIONS OF ACTUAL QUANTITIES	
		OF WORK WHICH WILL BE REQUIRED.	
			NOT TO SCALE

SHEET NO. Plotted Date: 12/12/2014

REVISION DESCRIPTION

REV. DATE

JPC

STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** 

Filename: ...\S-13\_sb\_00630702\_Crack\_Sealant\_and\_Parapet\_Joint\_Details.dgn



PAVEMENT PRESERVATION MILLING AND RESURFACING OF INTERSTATE 91

CITY OF HARTFORD TOWN OF WINDSOR

CRACK SEAL DETAILS &

**S-13** 

63-702

PARAPET JOINT DETAILS

